



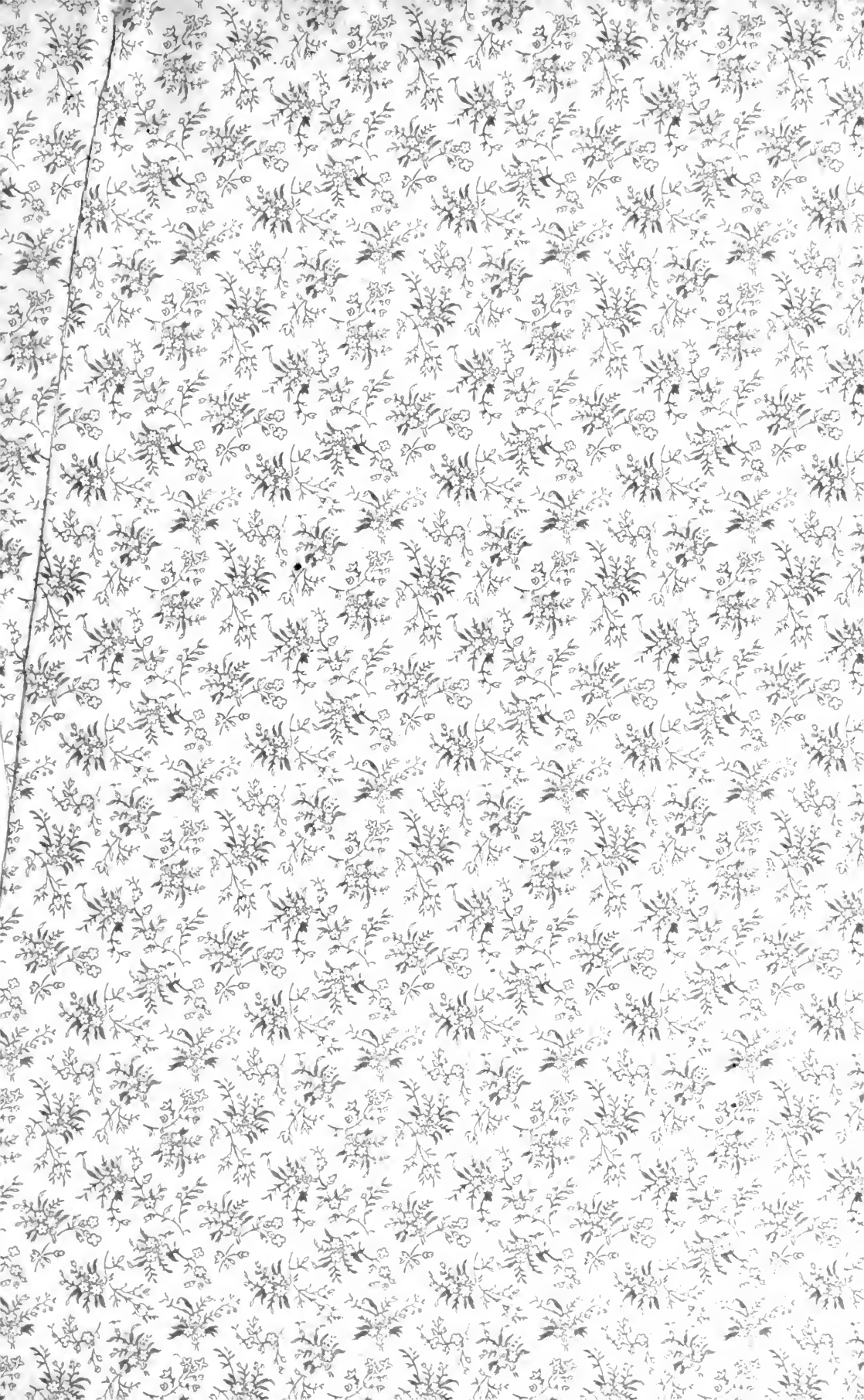
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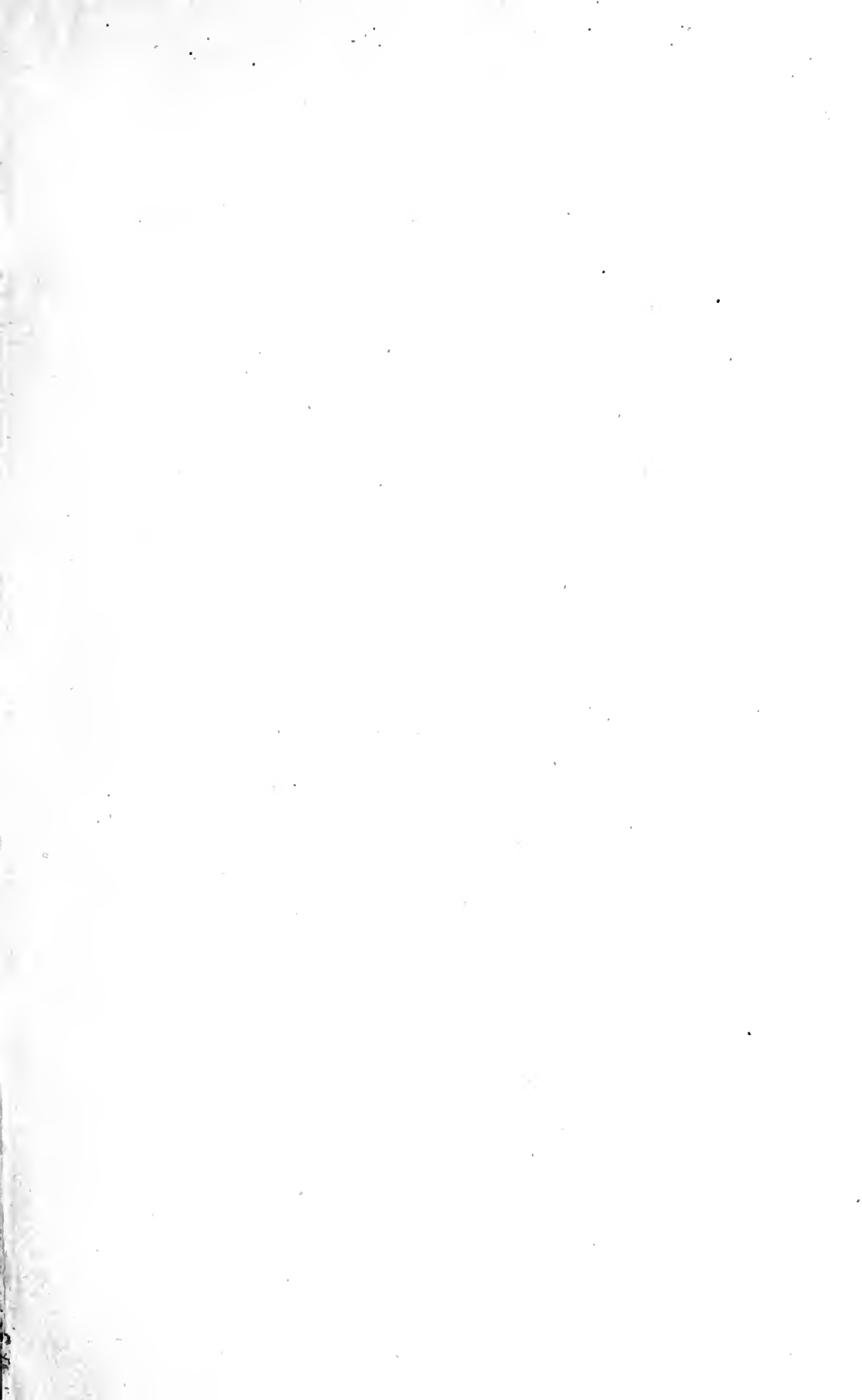


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# CANADA MEDICAL RECORD:

*A Monthly Journal of Medicine and Surgery.*

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VOLUME IV.

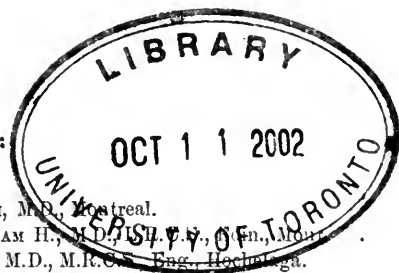
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## Original Communications.

### *Remarks on Two Cases of Dropsy and their Treatment, by CASEY A. WOOD of Ottawa.*

It is customary, in speaking of dropsy, to insist that it is more the symptom of a disease than a disease in itself, and that it is much more scientific to treat the original trouble than the mere symptom; but it often happens that it is difficult or impossible to ascertain during the life of the patient where the primary disease is, or even, in some cases, the post mortem examination does not give any satisfactory clue to its real seat. "Practically speaking, in such cases," observes Dr. Watson, "the dropsy is the disease and the sole object of treatment."

Furthermore, the liquid collections constituting dropsy may prove to be the most troublesome and distressing part of renal, cardiac or hepatic disease, and it may, by its presence, cause all the patient's suffering, as well as most of the danger to his life. In removing the dropsy we get rid, for a longer or shorter period, of a dangerous symptom, make him comfortable, and bring him to what is, as far as his feelings are concerned, a complete state of health.

It not unfrequently happens that anasarca is secondary to causes totally unconnected with organic disease of the heart or kidneys, as we see in the sudden stoppage of perspiration more or less profuse. When a laboring man, for instance, through continued bodily exertion, has brought himself into a copious perspiration, and while in this state gets chilled or wet through, the exhalation of watery vapor from the cutaneous surface is suddenly checked, and in a very short time the man may find himself everywhere anasarcaous.

So also in debilitated persons and those suffering from anæmia and chlorosis, in whom the heart's action is weak and unable to propel with sufficient force the necessary quantum of blood, general dropsy may supervene. Here, of course, the organ is merely functionally deranged.

In the first of these cases the anasarca is the chief thing to be treated, and, when that is got rid of, the patient may be said to be cured. In the latter case constitutional treatment with iron and other tonics is, of course, called for, but the first thing and, for a time the chief thing, to be removed is the dropsical effusion.

While all this is unquestionably true, it would, of course, be unwise to do nothing for the primary trouble, the cause of the dropsy. While getting rid

of its most troublesome and uncomfortable symptom no one could call in question the advisability of treating the real disease, and yet how seldom it is that any treatment avails for serious lesions of the kidney or right heart, or how often it is that nothing can be done for organic liver disease and other obstructions to the portal circuit—the most fertile causes of ascites? The one thing to be pursued is that of palliation, and usually the only symptom that requires looking after is—dropsy. It was for the purpose of introducing what has proved a most effectual mode of quickly removing the fluid accumulations of anasarca and ascites that the following notes were prepared. In the cases themselves there is nothing peculiar.

In the first one anasarca came on as the result of overwork and careless exposure, aggravated by kidney disease. The second case was one of ascites, which came on gradually and was traceable to derangement of the liver. The reports are incomplete, as it was not intended to enter into their pathology, diagnosis, etc., but only with the intention of considering the effect of a certain plan of treatment on them. The mode employed is not a new one altogether, but its employment has not been urged, by writers on the subject, with that positiveness which the results obtainable by its use certainly call for.

The first case, to be briefly mentioned, was that of a man J. F., æt. 44, an axeman in one of the shanties. In March, 1875, he noticed that his feet began to swell slightly, and, although he had no pain in the ankle, he applied to and received medicine from a neighboring physician for rheumatism. He grew rapidly worse, so bad at last that he had to leave his work in the shanty and take a long cold journey to the city. When he reached this place the swelling had extended until his face and neck were painfully bloated, and the function of respiration so interfered with that the only position he could get any ease in was by leaning over a desk or high table. He went under the care of a physician who gave him some remedies that nauseated him very much, and yet caused very little diaphoretic effect. Seemingly disheartened at the small effect his course of treatment had upon the case the physician advised him to go home at once, and assured him that he could not live more than four or five days. This same advice was given him a second time by another medical gentleman he applied to, and had there not been something effectual done a short time afterwards their prognostications would have been veri-

fied, because, when he came under my observation a few days after, he was completely anasarcaous, and so exceedingly distended was his skin in some parts that it hardly pitted on pressure; his legs seemed like huge bags of water; his whole body was bloated in the extreme; his breathing short and hurried; his lips were blue and his face wore an anxious look, in fact, the man was slowly dying of suffocation. His skin was harsh and dry, and he himself said that he had not perspired for a considerable time.

He was ordered at once to take a Juniper vapor bath, made as follows:—a large iron pot is filled with the small branches and berries of the evergreen Juniper (*J. communis vel depressa*, found growing wild in many of our meadows); cold water is poured in until the pot is full, the whole being heated on a stove until the water boils. It is then allowed to boil ten minutes—not longer, because the volatile oil upon which the virtues of the plant depend, would be dispelled by the heat and lost. The pot is now put underneath a cane bottomed chair on which the patient is seated and completely covered with heavy flannel blankets that are made to fall over his feet to the floor.

The blankets should be securely pinned around his neck above, so that the steam laden with the volatile principles of the plant is nowhere allowed to escape. By means of a stick the pot may be occasionally stirred, so as to send up fresh supplies of the heated vapor. The effects of the bath are increased by keeping the room at a temperature of 80° or 90° F. The patient should remain in this position for the first two or three baths, from one-half to three quarters of an hour, according to his ability to stand it, and after this until copious perspiration is induced. During the steaming process he should be given every ten minutes a table-spoonful of gin, with the double purpose of getting the diuretic effects of the oil of Juniper contained in the liquor, and of keeping up the patient's strength by the stimulant, as, of course, the process is likely to cause faintness. It will be of the greatest utility to have him take at the same time some warm drink, as thin gruel, or if he prefer it, hot weak tea. This will not only increase the diaphoresis but will allay thirst.

When the bath is over the patient should at once retire to bed and cover himself up with bed-clothes, when he will probably continue to perspire for some time. Some disappointment may be encountered the first time the vapor bath is tried; for although the

patient may be well covered up, may drink of warm aliments, and the pot placed under him be large and well-filled with the hottest of Juniper water, little or no perspiration may appear on the sufferer's skin. This is not to be wondered at when one considers how dry, harsh and unperspiring the skin of a dropsical person is. Still it is wonderful how soon it recovers its lost function, for after the second or third trial the skin becomes somewhat moist and loses its dryness and harshness. Each succeeding bath causes more profuse sweating than its predecessor until at last the water rolls off the person's face, body and legs in a perfect stream and soon shows its power of reducing the quantity of water wherever it is abnormally deposited in dropsy. Its effect on the patient in question was perfectly surprising. After using the baths every day for a week he was reduced to almost his natural size, the dyspnoea had entirely disappeared, the anxious look had gone from his face, his lips were of natural color, his breathing was normal, and he looked and felt in every way better. He was now told to use the baths a week longer, every other day, and to take the following:—

R. Tinct. Juniperi (but made with berries and gin.) . . . . . ℥ iij.

Potass. bitart. . . . . ℥ ij.

Aquæ ad. . . . . ℥ viij.

M. Sig. A dessertspoonful three times a day.

Neither a very nice looking nor a very scientific prescription but a very *effectual* one. At the end of three weeks he went home perfectly recovered. He was seen three months after, when he felt all right with the exception of occasional pain across the small of his back. He was on his way to the shanties for the winter, when he may again expose himself to a return of the dropsy, or it may be that from exposure to cold and wet he may aggravate his almost quiescent renal disease, and so induce another attack.

However that may be, there is no doubt but that the course of vapor baths with Juniper effectually and promptly relieved him from a situation which would have soon culminated in death.

The second case was that of a man, H. H., aged 49. In the early part of the year he had noticed that his abdomen was slowly enlarging, and as he was naturally inclined to be corpulent he thought it was due to his getting fatter. However, as time went by, he saw that he could not walk far without experiencing great shortness of breath. The prominence of his abdomen increased, he felt pain in his stomach after eating and drinking, and when he

could not walk any distance or exert himself without distress he concluded it was time to apply for medical treatment.

When first seen one could easily recognize a very fair case of ascites; the pressure of the pent-up liquid in his stomach after a meal caused a certain amount of pain and uneasiness and the resistance offered to the diaphragm in its downward movement hindered his breathing. His skin felt quite dry, and he said he had not perspired freely for a long time.

For the first ten days he was ordered to take the vapor baths and was given a diuretic mixture. The dropsical effusion gradually went away, and with it disappeared all his other complaints and he left cured. He was given the following, and advised to take, at home, an occasional vapor bath :

R. Magnesia Sulph. . . . . ʒ viij.  
Acid, Sulphuric . . . . . ʒ j.  
Aqua pur. . . . . ʒ xvj.

M. Sig. A tablespoonful in a tumbler of water before breakfast every morning.

When last heard from (two months after treatment) he expressed himself as perfectly well and with no sign of dropsy.

The vapor bath in this case did not act as promptly as in the first, and it will always be more likely to remove the fluid accumulations of anasarca than of ascites, probably because in the first disease the eliminating glands are situated close by (almost in contact with) the effused fluid, and the depleted vessels take up the water only to pour it out at once on the surface of the body, while in ascites this is done indirectly, and if any obstruction be offered to the flow, through the veins of water-charged blood from the peritoneum to the skin (and in ascites there nearly always is) one can readily perceive how tedious the process may become if not assisted by diuretics or mild watery cathartics. Yet, for reasons to be afterwards considered, this mode may be found preferable, as a rule, to some other plans of treatment.

In treating dropsy the greatest reliance seems to be placed on some one of the following remedies:—diuretics, hydrogogue cathartics, bleeding, in ascites paracentesis abdominis and in anasarca acupuncture.

Sudorifics, like the Juniper bath described before, may always compare favorably with them, and in many cases be preferable, because (1) of the whole amount of water taken into the body, at least 26 per cent. is eliminated by the skin; hence it is easy to see

what a large quantity of fluid may be got rid of through its agency, if it be incited to vigorous action.

(2) In anasarca the watery deposits are immediately under the skin, and consequently near the capillary network that surrounds the extremities of each sweat gland. These cutaneous capillaries, once depleted by the flow of perspiration, eagerly drink up the nearest water—which is that of the dropsy. This argument would not hold good in the case of ascites, and would even seem to indicate diuretics, but here a third proposition ought to be considered :

(3) The kidneys are vital organs, necessary to life, and it is of the greatest importance that their functions should not be impaired, nor their structure injured. When, however, powerful diuretics are constantly given, and they have to bear all the burden of elimination, they must suffer. Not so with the skin; its functions may be stimulated and it may even be overworked without injury to the vital powers.

(4) In the use of diuretics, for anasarca especially, it should be remembered that even when the dropsy is plainly dependant upon disease of the heart, renal complications almost always exist, and to stimulate the kidneys by the continual use of powerful remedies would surely increase the kidney disease, which is to be avoided.

(5) The action of hydrogogue cathartics, though usually effectual, is harsh in the extreme and quickly exhaustive, while the gradual depletion of the blood vessels in sweating is attended by nothing unpleasant, by nothing, at least, that cannot be guarded against.

(6) Bleeding acts by emptying the blood vessels and thus facilitating the re-absorption of the effused liquid, but in this case the nutritive properties of the vital fluid are removed with the water, thus weakening the already debilitated patient and robbing him of what he can least afford to lose. The action of the skin is to remove only the watery parts of the blood, leaving behind the necessary fibrin and red particles.

(7) In abdominal dropsy nothing is so directly effectual as tapping, as also in anasarca acupuncture is not unfrequently used in much the same way. The vapor bath will be found to be quicker and safer (gangrene has followed these holes when made in dropsical limbs) than the needle in anasarca, and as far as the patient's feelings are concerned will compete quite successfully with the trocar in ascites.

(8) The employment of these baths not only

enables us to use as *adjuncts*, diuretics and hydrogogue cathartics, but gives us the privilege of discontinuing the former if renal disease is suspected, and the latter if intestinal lesions contra-indicate them. OTTAWA, September 16th, 1876.

## Progress of Medical Science.

### IDIOPATHIC PYROSIS.

A Lecture delivered in Hôpital de la Pitié by Professor Laségue. From the Allgemeine Wiener Medizinische Zeitung, July 18, 1876.

Pyrosis is a trivial affection of the stomach which generally lasts but a short time and rarely necessitates hospital treatment. Nevertheless, as it is quite frequently met with in ordinary practice it should receive our careful attention and study.

As a text for my remarks I present to you, to-day, a laborer, 38 years of age, otherwise in excellent health, who for about ten years has had very painful attacks of a peculiar gastric neuralgia, which last on an average 10-12 days and recur three or four times a year. The pain does not radiate toward the spine as in simple ulcer of the stomach; it is not a cutting or piercing, but a burning pain, a feeling of internal heat, and at times of an unbearable fire within. When it spreads at all it is upward, following the course of the œsophagus.

The pain is often accompanied by sour vomiting and sometimes, when the attack is particularly severe, the patient vomits ropy mucus similar to that of drunkards, but never vomits blood or food. Another resemblance between this vomiting and that of the inebriate is that it always occurs in the morning before the introduction into the stomach of food, and not immediately after eating or an hour or two after, as in round gastric ulcer or in carcinoma of the stomach.

This man never indulged to excess in spirituous liquors, but inclined to the opposite extreme. Of late the disease has made him almost a hypochondriac. He is afraid of everything which he thinks might produce an attack or increase the severity of his disease, and, knowing that the abuse of alcoholic stimulants often injures the health, he is quite rigorous with himself in this regard. Therefore drunkenness cannot be the cause, although his case seems to have a good deal in common with alcoholic gastritis.

The man's tongue is coated, his appetite is diminished, and he is somewhat inclined to constipation,—symptoms quite common among tipplers; he has never, however, presented any symptoms referable to the brain or sensory nerves. During the attacks he sleeps but little, but his sleep is not disturbed by frightful dreams, nor has he any of the hallucinations common to drinkers.

This idiopathic pyrosis disappears regularly within a few days. Can we attribute this to a rational mode of treatment?

In similar cases we usually begin with the administration of mild laxatives, magnesia, for example, continue it for four or five days, then substitute the alkaline carbonates. Finally we order tonics to arouse the lost appetite.

This medication is, perhaps, rational, but is it effective and useful? This we think we have good reason to doubt.

Although the magnesia and the alkalies would probably tend to neutralize the increased acidity of the gastric fluids, and although under their administration we see recovery follow in numerous cases, it is none the less true that very often this is not the case and that the pyrosis continues for weeks and months during the administration of these remedies. We are, therefore, justified in asking the question to what extent the duration of the neuralgia can be cut short in this or that individual by the exhibition of the above mentioned agents.

Finally, it must be remembered, that when a pyrosis passes off with or without rational treatment, we do not cure the affection but simply hasten the crisis.

A symptomatic pyrosis, distinct from the affection of this individual, is often observed in men who produce an irritability of the stomach by the continued use of certain articles of diet or certain medicaments. Some of the "imitation" wines, made by the addition of acids, produce a pyrosis, by which several persons of one family are frequently attacked. On changing the wine, the neuralgia passes off in a few days and does not return so long as the wine taken by the patients is good. Every one is aware that the salts of quinine very frequently produce neuralgias of the stomach, as do also various chalybeate preparations and a few other medicines. Such pyrosis is not, however, idiopathic as in the case I have presented to you to-day.

### THE BISULPHIDE OF CARBON IN THE TREATMENT OF CANCER OF THE STOMACH.

In a paper read by Dr. James T. Whittaker before a Cincinnati society (*The Clinic*) he spoke of the singular efficacy of bisulphide of carbon in the treatment of carcinoma of various organs, especially of the stomach. "Whatever theory may be entertained regarding its nature, the fact remains that cancer is a disease characterized by a too rapid proliferation of the tissues, epithelial, connective, etc., which form its seat, and I have cherished the belief that any agent which would check this proliferation would attack the chief result, if not the actual cause, of the disease. Why should there not be found anyhow a remedy as efficacious for cancer as the iodide of potassium for syphilis?"

"We can arrest the progress of putrefaction and fermentation, or even prevent the development of these processes by certain agents which have the power of preventing the development of, limiting the growth of, or destroying the fully-matured vegetable and animal germs upon which these processes depend. Salicylic and carbolic acids are agents of

well-known powers against putrefaction; and the hyposulphites, especially that of soda, are equally effective against fermentation. Each of these processes consists, in essence, of swift multiplication of peculiar cells."

Two cases are reported by Dr. Whittaker: one, a woman having secondary cancerous tumors in various parts of the body, who had two months before suffered amputation of the breast for the same disease, and who had cancerous cachexia, cancerous deposits in the stomach, and probably in the liver also. Any kind of food was vomited, and prostration was complete. The patient was kept alive and free from pain by the use of 6 grains of morphia daily,  $1\frac{1}{2}$  grains being the smallest dose that would give her temporary relief from the indescribable distress.

"I gave her," to quote his words, "at first two drops of the bisulphide of carbon in a teaspoonful of alcohol three times a day. This dose I afterwards increased to four drops in almond oil. From almost the first dose, in virtue of the anæsthetic action of the drug, a change in her symptoms began to be observed. There was complete relief of the vomiting at the time, and there have been but three attacks since. The appetite toned up to become almost insatiable, though but little food can be taken at a time, on account of a feeling of distention. The return of strength was gradual but marked. Last week the patient spent the day out among some friends, and this week she spends entire in Avondale. It was found impossible to do without the morphia altogether, but the quantity has been gradually reduced from six to little over one grain per day. The local masses have not changed to any great extent. No new ones have developed, but several of the old ones have flattened somewhat. None of them are painful."

\* A second case is reported of a woman having what was diagnosticated to be cancerous stricture of the pylorus, in which vomiting was a prominent symptom, and was quieted only by morphia. She was also given two drops of bisulphide of carbon three times daily. "On the evening of the following day she had another attack of pain and vomiting, which was checked by morphia given subcutaneously. Since that time" (two weeks to the date of the report), "she has taken the remedy regularly. During this time no other medicine has been given *per os* or subcutaneously. All this time she has taken egg-nog, milk, wine, and beef-tea, and has never vomited any of them. She relishes her food, but still experiences some uneasiness after eating. She has gained both appetite and strength and is now able to walk about the house. The sallow skin, the dilated stomach, and the tumor still remain. I do not by any means consider my patient cured of her disease, but it is unquestionably better held in check by the bisulphide of carbon than by any remedy hitherto employed."

"It was the knowledge of the great solvent properties of this agent which first led me to give it a

trial. I am sure I am very far from vaunting it as a specific for carcinoma. I am not certain that its virtues are not dependent upon its well-known anæsthetic properties (I am informed by ship surgeons that it is the best known remedy for seasickness), but even if this be true—which I very much doubt, because its efficacy is so long continued—it is a remedy of the greatest value in the relief of symptoms as distressing and painful as exist in any disease in our nosology."

#### TO DESTROY WARTS.

Mr. Frank Parker, of Mineral Springs, Ark., says that a drachm of nitrate of silver dissolved in an ounce of nitromuriatic acid makes a solution which, applied to warts with a fine brush, will permanently cure them in four days.

#### TO CLEANSE THE OS UTERI.

Every gynecologist, says Prof. Paget, knows how difficult it often is to cleanse the uterine orifice of the viscid mucus which is characteristic of certain forms of catarrh. After trying a variety of chemicals, in order to discover a satisfactory detergent, the simplest substance suggested itself the last, and was found all that can be desired. This is the yolk of egg. Dip a piece of charpie or cotton in the yolk of a fresh egg, apply it to the orifice, throw some water into the speculum, continuing to mix the yolk and the mucus, then let the water escape, dry the os, and it will be found perfectly clean.

#### THE RELIEF OF PRICKLY HEAT,

Many persons are very subject to this annoying affection. They will be glad to learn that Surgeon-Major Dr. J. G. French, of the Indian medical service, in a contribution to the *Indian Medical Gazette*, says that we can cure prickly heat in three or four days by the application of a solution of sulphate of copper. This should be of the strength of about ten grains to the ounce of water, and the solution should be applied daily, or oftener, by means of a camel-hair brush, or bit of sponge tied on the end of a stick. It is best applied after the morning bath, when the skin has been well rubbed with the towel, and it must be allowed to dry on the skin before dressing. Dr. French states that he has used this application for over thirteen years, and, when regularly and properly applied, he has never known it to fail.

#### ON WRY-NECK.

On the occasional forms of his trouble, Dr. A. J. Steele writes, in the *Transactions* of the Missouri State Medical Society, 1876:—An adult exposed to a cold draft of air, as from an open window, falling especially upon the neck, may have an attack of cervicodinia, a painful affection of the muscles of one side of the neck, to relax which the patient holds his head awry. This so-called muscular rheumatism is usually a transient affair, but may become chronic,

and thus occasion permanent deformity, designated *torticollis rheumatica*. In the acute stage, the treatment should be, internally, salines and possibly quinia; externally, hot anodyne fomentations, the continuous galvanic current and hypodermic injections of atropia. In the chronic form, guaiacum internally, and friction and galvanism locally, will relieve the stiffness of the muscles and allow the head to assume its more normal position. Assistance can further be gained by faradizing the lengthened muscles, thereby increasing their contractile power.

There is another adult affection to which this region is subject, termed *torticollis spasmodica*, in which, when fully developed, the head is subject to constant twitchings, being drawn to the side of the disturbed muscles. For a time the muscles of the sound side resist, and restraighen the head, but, as weeks or months go on, this contest is seen to be unequal, and the healthy tissues become permanently relaxed, not even replying to the strongest will effort, and the wry-neck becomes fixed. During sleep, or lying down with the head supported, or under anæsthesia, the jerking ceases; while on the other hand, whatever disturbs the general health, or causes emotional excitement, increases it, as also does physical exertion. The contractions are often accompanied by pain. This condition may be but one aspect of a more general nervous affection in which the muscles of the face, or of the shoulder, or of the arm, or of deglutition, or of the leg, are involved, but it is the rule that the muscles of the neck only are affected. No constant or general exciting cause can be given for this spasmodic condition, nor are we familiar with its primary cause.

Electricity exerts a decided influence on the parts, and has been employed with marked temporary benefit. Its rule of application is this: To the contracted muscles the continuous current, inducing relaxation; to the elongated muscles, the faradic, or interrupted galvanic current, causing powerful contraction. Subcutaneous injections, both of morphia and atropia, afford temporary relief; the latter, conjoined with the internal administration of bromide of zinc, has effected cures. The wearing of an apparatus is judicious, in that it gives surcease to the twitchings for a time. Neurotomy, though occasionally successful temporarily, has not furnished the good results that might be expected.

#### PLEURAL EFFUSIONS AND THEIR TREATMENT.

Dr. Ringer, of the University Hospital, as reported by the *British Medical Journal*, says:—

As to tapping, it was formerly reserved for extreme conditions, but now we aspirate, either to assist absorption, or to save the lung. Hence it may be done early, say when the chest is half full of fluid. The febrile state may last twenty-five or thirty days, we need not wait till it is over. The effusion contains so much albumen as to be practically a bleeding, and should be stopped as soon as possible. After an early tapping, I have known fever to continue a fortnight without fresh effusion. We may classify cases

into those with simple serous effusion and simple purulent effusion; either may be *with* fever or *without*, and all will probably do well with aspiration. Then there are cases where the pus is fetid; if there be no high fever, give these a chance with simple aspiration; and even if there be fever, though the case then is very grave, one trial should be given to the same plan before an incision is made, for I look upon the free opening of the chest as a very serious and risky affair. The case before us has done well with a single aspiration. Examining for the results, and judging of the amount of expansion of lung, beside auscultating, etc., we look at the angle formed by the costal arch in front; in health the angle should be obtuse, and nearly equal on both sides, perhaps more obtuse on the right, owing to the liver, whilst, if the lungs have not expanded, the arch will have sunk in somewhat, and the angle be more acute; the shoulder at the affected side will be lowered, and the spine, whilst often curved with convexity toward the same side during the stage of effusion, will have an opposite direction when the effusion has disappeared." Another case of pleuritis, in which five pints of serum had been removed by aspiration, was somewhat unusual, as being secondary to Bright's disease. In this form of malady the progress is usually insidious, and yet the effusion rapid. We know, from the effect of blisters in such patients, how quickly effusion may be poured out in any part. Dr. Ringer does not think it necessary to stop the withdrawal at any definite quantity, nor does he consider cough an indication for withdrawing the needle, only if much pain be complained of or if blood begin to come.

The *Centralblatt* states that from a series of observations made during fifteen years in Frerich's wards with special reference to operative interference, C. A. Ewald arrives at the following conclusions:—

1. In cases of serous effusion in the pleura, puncture should be performed before the third week, only if life be in danger.
2. If puncture be made under exclusion of air and with previous disinfection of the instrument, no serous exudation becomes purulent.
3. The only means of determining with certainty whether a pleural effusion is serous or purulent is an exploratory puncture.
4. Incision, with puncture, should be made as early as possible into purulent exudations.
5. The mortality after incision into purulent effusions is from 50 to 60 per cent. when they are treated according to the present plan (incision in the sixth intercostal space between the nipple and the anterior axillary line, washing out with disinfectants once or twice daily, a catheter being retained in the wound, or one or more ribs resected).
6. Sanguineous effusion (in which blood becomes mixed with the exudation in consequence of the dilatation of vessels, leading to their rupture) is always the result of malignant growths of the pleura.
7. Serous exudations do not exclude the presence of tuberculosis and cancer of the pleura.

#### ON THE TREATMENT OF CHOREA.

L. Farry relates in the *Bulletin de Thérapeutique* (quoted in *Paris Médical*, March 9, 1876)



some observations carried out in the service of Dr. Perroud, of Lyons, on the treatment of chorea by ether-spray. This therapeutic agent, employed for the first time in 1866 by Lubetski, has given good results in Dr. Perroud's hands.

Applications of ether-spray are made along the spine by some spray-producing apparatus, such as those of Richardson or Marinier. Each application lasts from four to eight minutes. At the commencement of the treatment applications should be made three times a day; afterwards the number may be reduced to two.

Ice produces the same effect as ether-spray; a piece of ice may be passed along the length of the vertebral column for five minutes at a time.

These two means have effect by their refrigerant revulsive action on the excito-motor point of the nervous centres.—*Lond. Med. Record*, May 15, 1876.

#### IMPORTANT TO EXAMINERS OF LIFE INSURANCE.

DR. THEODORE PARKER'S

##### *Limit Table of Weights and Measurements.*

Limit of underweight, 25 per. cent. Limit of overweight, 45 per cent.

| Height.        | Chest.      | Standard weight. | 25 pr. ct. Under weight. | 45 pr. ct. Over weight. |
|----------------|-------------|------------------|--------------------------|-------------------------|
| 5 ft.....      | 33½ in..... | 115 lbs.....     | 92 lbs.....              | 167 lbs.                |
| 5 " 1 in 34 "  | "           | 120 " " " " " "  | 96 " " " " " "           | 174 " "                 |
| 5 " 2 " 35 "   | "           | 125 " " " " " "  | 100 " " " " " "          | 181½ " "                |
| 5 " 3 " 36 "   | "           | 130 " " " " " "  | 104 " " " " " "          | 188½ " "                |
| 5 " 4 " 36½ "  | "           | 135 " " " " " "  | 108 " " " " " "          | 195 " "                 |
| 5 " 5 " 37 "   | "           | 140 " " " " " "  | 112 " " " " " "          | 203 " "                 |
| 5 " 6 " 37½ "  | "           | 143 " " " " " "  | 114 " " " " " "          | 207 " "                 |
| 5 " 7 " 38 "   | "           | 145 " " " " " "  | 116 " " " " " "          | 210 " "                 |
| 5 " 8 " 38½ "  | "           | 148 " " " " " "  | 119½ " " " " " "         | 215 " "                 |
| 5 " 9 " 39 "   | "           | 155 " " " " " "  | 124 " " " " " "          | 224½ " "                |
| 5 " 10 " 39½ " | "           | 160 " " " " " "  | 128 " " " " " "          | 232 " "                 |
| 5 " 11 " 40½ " | "           | 165 " " " " " "  | 132 " " " " " "          | 239 " "                 |
| 6 " " 41 "     | "           | 170 " " " " " "  | 136 " " " " " "          | 246 " "                 |
| 6 " 1 " 41½ "  | "           | 175 " " " " " "  | 140 " " " " " "          | 254 " "                 |

The Doctor says this table was constructed by him seven years ago, as a guide in his company, the Globe Mutual Life, of this city, and experience has confirmed its value, as a rule that applicants 25 per cent. under standard weight and 45 per cent. over are not safe cases for insurance at regular rates.

As a limit, therefore, of under and over-weight, it will aid the examiner in forming an opinion of the safety of the risk for his company. Twenty-five per cent. *under-weight* is the loss of one-fourth of the man, and calls for the most searching investigation on the part of the examiner. These light weight cases may be the result of chronic dyspepsia, diarrhoea or dysentery, marasmus, scrofula, hemorrhoids, (bleeding), hypertrophy of the heart, with excessive impulse, albuminuria, Bright's disease. In addition to these in the case of females, some chronic uterine disease may be suspected. The exceptions are few in which it is safe to disregard these limits, and in every such case of under-weight tests for Bright's disease and other obscure organic mischief are imperatively indicated. In this connection will be seen the importance of being accurate in

stating the height and weight. Mistakes might cause the rejection by the Home Office of a good risk, or the acceptance of a bad one.

#### SALICYLIC ACID FOR OFFENSIVENESS OF BREATH AND EXPECTORATION.

Dr. Da Costa, *Medical and Surgical Reporter*, prescribes salicylic acid, five grains, dissolved by means of a drachm of glycerine in a half-ounce of water, taken three times a day, in cases where the breath or expectoration are offensive. If internal administration does not accomplish the desired result, it can be used with the atomizer in a solution of similar strength.—*American Practitioner*.

The London correspondent of the *Philadelphia Medical Times*, writing early in August last, says: "Mr. Spencer Wells recently removed at the Samaritan Hospital a large spleen, which had been diagnosed as an ovarian tumor. On tapping it its nature became apparent, and nothing was left but to give the patient a chance for her life by its removal. It weighed eleven pounds. The vessels were all carefully secured, but the patient sank in a few hours. This is a very rare form of diagnostic error, and there must have been a very close resemblance to an ovarian tumor, for Marion Sims was present at the time, and these two masters of the subject are not likely to have been readily deceived."

#### TREATMENT OF EXCORIATIONS OF THE OS UTERI.

In the *Dublin Journal of Medical Science*, Dr. Halton gives a number of cases, and says, on their therapeutics:—

The treatment adopted was that which has had its origin in the Dublin School,\* and which has, notwithstanding considerable opposition from other quarters—opposition which, it may be remarked, sometimes overstepped the boundary of politeness or even of pathological good sense—gradually obtained the approval of the majority of the profession. It consisted in reducing local congestion by local means and touching the excoriated surface with the strong nitric acid. This was always carried into the cervix when that appeared diseased, and the acid brought in contact with the whole surface of the canal, and even to the fundus if necessary.† It never gave rise to the slightest symptom of danger or distress, and in the vast majority of instances was altogether unfelt. When pain did occur, its amount was so trifling as to attract little notice from either the patient or physician. Astringent injections were found to be of little use, and whether this was from the patient's awkwardness in managing them or not, they have been latterly dispensed with altogether, and their place supplied by the tannin pessory, or bougie,

\* Ringland.—Kidd. *Dub. Journ. Med. Science*, Feb. 1869.

† It is by no means necessary in all cases to dilate the os before touching the interior of the uterus with nitric acid. In many cases where this becomes necessary, the canal of the cervix is sufficiently patulous to admit the stilette covered with cottonwool soaked in this agent.

placed in contact with the os or introduced into the canal. The skin of the abdomen has been leeches or blistered, as seemed most suitable, over the tender spot in the region of the ovary, with very marked benefit. When much leucorrhœa was present, small blisters to the sacrum were found serviceable, while ergot and Indian hemp were useful internally, particularly when hemorrhage was present, but, undoubtedly, the most generally effective drugs were strychnine, in small doses, in combination with dilute nitric acid. To these was added some form of tonic, and, if local treatment was from any cause inadmissible, this mixture, I think, would afford the best chance of relief. The following is the formula used:—

|                          |            |
|--------------------------|------------|
| R. Liquor of strychnine, | 3 iss      |
| Dilute nitric acid,      | 3 ij       |
| Tincture of gentian,     | 3 ss       |
| Hoffman's liquor,        | 3 iij      |
| Aqua,                    | q. s.      |
|                          | 3 viij. M. |

The dose is one tablespoonful thrice daily, before meals. If pyrosis is present, which it sometimes is, even in our tea drinking peasantry, a drachm and a half of sedative liquor of opium added to the above for a week or two, taking care to regulate the bowels with suitable aperients, will be found serviceable. In the directions it was not considered advisable to interfere with marital relations, except in case of serious hemorrhage, and, while the value of exercise and fresh air was sufficiently impressed, they were enjoined to avoid standing or kneeling as much as possible.

#### YELLOW-COVERED HAMS.

Professor Bouchardat, one of the members of the Parisian Council of Hygiene and Salubrity, has recently called public attention to some of the foreign preserved meats imported into France as being unfit for human food, and in many cases positively dangerous. He refers especially to a kind of ham imported from Cincinnati, which is usually enveloped in a cloth saturated with a yellow substance, which, on examination, proved to be chromate of lead—a ready poison. Professor Bouchardat suggests that, if the American purveyors prefer to have a yellow envelope around the alimentary substances they export, the chromate of lead may be substituted by any other yellow substance—turmeric, for instance, which is known to be entirely harmless.

#### LOTIONS FOR THE REMOVAL OF FRECKLES.

The editor of *New Remedies* gives, in answer to a correspondent, the following recipes for the removal of freckles.

The spots on the skin called freckles are probably of two kinds: one, occurring in persons of light complexion, from exposure to the sun, is caused by a deposit of pigment or melanin in the rete Malpighii and is of the nature of chloasma (or "moth"), melasma, the areola of the breast in pregnancy, etc.; while the other variety is more deeply seated, and, like the pigment of the colored races, dark moles,

etc., is deposited in the corium. The former variety is comparatively transient, and is said to be as successfully treated by spirituous lotions and weak mineral acids, applied several times during the day, as by any other method. At one time and another, however, a large number of cosmetics have been recommended, of which the following represent some of the more recent:

|                           |          |
|---------------------------|----------|
| R. Zinci sulphocarb. .... | 2 parts. |
| Glycerine .....           | 25 "     |
| Aq. Rosæ .....            | 25 "     |
| Spiritus vini rect. ....  | 5 "      |

Dissolve and mix. The freckled skin is to be anointed with this twice daily—the ointment being allowed to stay on from one-half to one hour, and then washed off with cold water. Anæmic persons should also take a mild ferruginous tonic. In the sunlight a dark veil should be worn.

Another formula containing the sulphocarbolate of zinc is quoted from the *Bulletin Gen. de Thérap.* as follows:

A solution of corrosive sublimate either pure or mixed with cyanide of mercury is commonly employed for the removal of freckles; but a collodion containing ten per cent. of its weight of sulphocarbolate of zinc has given excellent results without being accompanied by any of the dangers attending the use of the mercurial solution.

The following formula is an excellent one:

|                                  |           |
|----------------------------------|-----------|
| R. Sulphocarbolate of zinc ..... | 1 part.   |
| Collodion .....                  | 45 parts. |
| Oil of lemon .....               | 1 part.   |
| Absolute alcohol .....           | 5 parts.  |

The sulphocarbolate of zinc should be reduced to an extremely fine powder, and should then be thoroughly incorporated with the fluid mixture.

|                            |        |
|----------------------------|--------|
| R. Pulv. sinapis alb. .... | 3 iij. |
| Olei amygdal. ....         | 3 s.   |

Succi limonum, enough to make a thick paste.

Mix. To be applied as an ointment.

|                            |           |
|----------------------------|-----------|
| R. Hydrarg. perchlor. .... | gr. v.    |
| Acid hydrochlor. ....      | gtt. xxx. |
| Sacch. alb. ....           | i.        |
| Spt. vin. rect. ....       | ij.       |
| Aquæ rosæ .....            | 3 vii.    |

To be used as a lotion.

It is also stated that powdered nitre, moistened with water, applied to the face night and morning, will soon remove all traces of freckles.

Our grandmothers used to have a remedy in buttermilk, with which, in our youthful days, our faces used to be scrubbed on Saturday nights, to clear them of sunburn and freckles for Sunday morning.

#### THE MANAGEMENT OF ALBUMINURIA.

In an article in the *London Medical Times and Gazette*, Dr. W. H. Dickinson, of London, writes:—

To give rest, as far as may be, to an inflamed structure, is an old and sound maxim; and it is not less obvious, in regard to the system at



large, that if a great channel of exit be obstructed, the materials which therefore tend to accumulate should be sparingly introduced. The diet with albuminuria, save with that of lardaceous origin, in which the secreting power is until late little interfered with, while an exhausting discharge may have to be obviated, should be below the custom of health in its nitrogenous components. It may abound in milk and farinaceous matter, while fish may often take the place of flesh. The increase of albumen in the urine, upon a too early resort to a meat diet, is a common experience. With regard to liquids, it cannot be too strongly insisted upon that the functional strain upon the kidney is not to be measured by the quantity of water which filters through it, but by the quantity of refuse, mainly nitrogenous, which it has to convert and eliminate. Water, which probably transudes almost as through dead membranes, probably makes little demand upon the real secretive function. The worst kidneys, indeed the most hopelessly incapable of their special work, will often discharge most of it; and it is easy to see that its passage, not to be regarded as the result of glandular effort, is salutary, both in the dilution of scanty and irritating urine, and also in washing out the solid products which, under the inflammatory process, collect mischievously in the tubes. A further use is to be discerned in this law. The solids of the urine vary with its water. With given kidneys, the solid excreta wax and wane with the bulk of the urine. Any means, therefore—mere aqueous filtration as safely as any—which increase this will also magnify the components of the secretions which are essential to life. With tubal nephritis, therefore, and scanty urine, an aqueous dietary, even with the addition of distilled water, or the element in some slightly sophisticated shape, will prove in every sense beneficial. In many, perhaps in most, cases of nephritis of tubal origin these remedies of patriarchal simplicity, "spare diet and spring water clear" are all that are needed to guide the disorder to its natural cure. To this surest and safest of diuretics others must often be added, both to lessen dropsy and to avert the dangers of uræmia. The old rule is that, in recent cases, digitalis should be used; it seldom fails to increase the flow of urine, but I am not sure that it does not sometimes do so with some exasperation of the inflammatory action. The bitartrate and acetate of potash, which have a purgative as well as a diuretic action, may probably be safely resorted to; and in chronic cases as much as may be done harmlessly by diuretics may be accomplished by means of scopolarium, nitre, and juniper. Cantharides and the more irritating agents of this class are generally distinctly injurious. Perhaps, next to a regulation of the diet, it is most important to secure a daily and somewhat loose

action of the bowels. Purgatives lessen the vascular tension, which, in both acute and chronic cases, is a measure of their danger; and while it is not advisable too largely to divert the urinary fluids by severe catharsis, increased hardness of the pulse, and other more obvious aggravations of the general state, seldom fail to ensue upon constipation. When cerebral uræmia is threatening, hard purging by elaterium or otherwise is essential. As a habitual laxative, a drug less used than it deserves to be—sulphate of potash—given two or three times a day in doses of from ten to twenty grains, is sometimes invaluable. It may be aided, if necessary, by Epsom salts or cream of tartar.

#### SOME POINTS IN THE PATHOLOGY AND TREATMENT OF CHOLERA INFANTUM.\*

By Edward Walde Emerson, M. D., Concord.

\* Read before the Massachusetts Medical Society, June 13, 1876.

If, during the last year, out of every twelve deaths in Boston one had been from yellow fever, Asiatic cholera, or plague, every one would be alarmed; the legislature, city government, and medical societies, would bestir themselves. But that was the actual proportion of the deaths reported from cholera infantum to the whole number of deaths of persons of all ages, and but little comment was excited. Yet the mortality, from either of the dreaded diseases first mentioned, should they get a foothold in Boston, probably would never approach that from this common affection. We have got so accustomed to it that it is regarded as a necessary evil. But the advance of sanitary science and physiology may make it worth while to consider carefully, from time to time, our every day diseases, and see if we are not better prepared to prevent or to fight them with the new tactics and weapons drawn from these sources, instead of using the consolations of philosophy for the annual loss under the old traditional methods.

With regard to this disease there is an opinion fast gaining ground that much if not all of it is due to causes largely within our power to prevent. As I do not propose to go into this branch of the subject, which is happily beginning to excite much attention here and abroad, I will quote but one passage from the excellent little book of Dr. John Simon, the chief medical officer or the Privy Council of Great Britain, on Filth Diseases, which was republished by the State Board of Health. He says: "In all filthy districts one particular class of diseases seems specially apt to stand in relief—the diseases, namely, which in respect of their leading symptom may be generalized as diarrhoeal. \* \* The mucous membrane of the intestinal canal seems peculiarly to bear the stress of all accidental putridities which enter the blood. Whether they have been breathed, or drunk, or eaten, or sucked up into the blood-vessels from the sur-

face of foul sores, or directly injected into the blood-vessels by the physiological experimenter, *there* peculiarly the effect may be looked for; just as wine, however administered, would 'get into the head,' so the septic ferment, whence-soever it may have entered the blood, is apt to find its way thence to the bowels, and there, as universal result, to produce diarrhoea."

In view of the great prevalence and fatality of this disease which the next month brings with it, under our present sanitary conditions, as surely as it does the white azalea or the water lilies, I have thought it might not be uninteresting to consider briefly in this paper its *pathology* and *treatment* to see if these fields may afford anything new and profitable. Many of the standard books are somewhat disappointing in their chapters on cholera infantum. The pathology is not often very definitely stated. Were this done, perhaps modes of treatment more in accordance with the physiological indications thence deducible, and offering better prospect of success, would supersede the more or less blind and unsatisfactory methods often recommended.

*Pathology.*—The name cholera infantum is often loosely applied to various summer diarrhoeas, but should be confined to that violent choleric form, gastro-intestinal catarrh of young children of which Leube says, in his article on the subject in Ziemssen's Cyclopaedia, that "its symptoms so closely resemble those of Indian cholera that if one were confined to the observation of the individual case he could not say which it was." However the irritants or occasioning causes may differ, the weight of testimony of the best modern authors is so great for the entire identity of the symptoms and of the post-mortem appearances in a severe case of this disease and of cholera morbus with those in Asiatic cholera, that I may safely treat of the pathology of the choleraic state in general, drawing my instances from cases of epidemic cholera also.

This condition becomes all too familiar to the physician during the weeks when the thermometer reaches 90° Fahr., when he may see a rosy, well-nourished, active child, with perhaps no warning beyond a very short stage of indigestion, suddenly seized with violent and profuse watery discharges, and soon after with vomiting of quantities of clear or slightly tinged liquid. There is coldness, pallor, pinched appearance, and even cyanosis of the surface, beginning at the extremities, but rapidly spreading to the trunk and head, which was at first remarkably warm, and the abdomen is a little distended. Notwithstanding the great apparent cooling, the deep rectal temperature rises to normal or above, according to the best authorities. The pulse is rapid, and becomes momentarily more difficult to feel. The thirst is great, the drink vomited. At the end of two days, or

in extreme cases even of twelve hours, the child may be hardly recognizable as it lies faintly fretful or drowsy, the fontanelles sunken, the lids half shut over rolled-up eyes, pulseless, pale, and cyanotic, with sharp features and cold, clammy, and apparently wasted limbs, the abdomen relaxed, the skin wrinkled and inelastic, the urine suppressed, the upward and downward discharges less frequent or stopped, the respiration shallow, the breath cold, and perhaps alarming little premonitory twitchings of the limbs. In old times, when they used to bleed, it was found that only a drop or two of thick, dark-red blood would flow.

When matters have reached this state, the child will almost surely die, either by increasing sopor or by convulsions. Or, under favorable circumstances, before extreme algidity and coma are reached, reaction may set in. In fact, one striking point about the state is that it seems to be self-limited if the patient can survive until the turning-point comes, which is usually not more than two and a half days at farthest from the onset. Then the patient usually begins to recover with great rapidity, unless a relapse occur or entero-colitis or other complication arises. The vomiting ceases, the pulse returns, the stools are less frequent and contain more fecal matter, the pinched and wasted appearance of face, body, and limbs disappears, with the return of warmth, color, and natural perspiration. Urine reappears, the rectal temperature falls to normal, or a little below, as the surface temperature rises. After death in the extreme algid state the surface temperature may slowly rise to normal or above, the body cools off very slowly, and rigor mortis comes on late and persists long.

The post-mortem appearances show no structural changes except a swollen condition of the solitary follicles, and Peyer's patches. Sometimes thickening of the blood and occasional slight ecchymoses under the serous membranes are found. The intestinal walls are injected. The large abdominal veins, the right side of the heart, and the pulmonary arteries are found distended with dark blood. The kidneys are congested, and sometimes the tubules are full of epithelium. The left side of the heart and the arteries are very empty, the membranes of the brain a little injected, the brain itself bloodless and sometimes oedematous. The lungs seem empty and dry, and collapse greatly. The intestine is full of clear or slightly turbid fluid like the discharges, consisting mainly of water and chlorides, with a little albuminous flocculent matter, showing under the microscope swollen epithelium and granular matter.

What, then, is the pathological condition that occurs? The collective symptoms of paleness, coldness, cyanosis of all the surface, and probably too of the lungs, together with the internal objective and subjective heat and the

immense activity of movement and transudation in the bowel, the suddenness of the collapse and apparent emaciation, and the equal suddenness of the recovery and the reappearance of heat and *turgor vitalis* would alone demonstrate, as plainly as any clinical phenomena could, that the main pathological condition was an entire change of the equilibrium of the circulation, namely, the engorgement of the abdominal at the expense of the peripheral and respiratory organs. The post mortem appearances put the matter beyond all doubt. In fact, it is a condition in many respects analogous to two other circulatory disturbances, syncope and shock, the pathology of which states are set forth at length in an interesting article in the *Practitioner* for October, 1873, by T. Lauder Brunton. Just how this disturbance of circulation is wrought is not certain, but a physiological explanation may be hazarded. To do this more clearly I will venture very briefly to state the received theories as to the innervation of the intestines.

A. Local ganglia have been demonstrated in the intestinal walls.

B. The vagi and the splanchnic nerves jointly preside over the stomach and intestines.

C. The vagi (sensory in their function) are the accelerating nerves of the intestinal tract. Their irritation produces increased movement of the intestines and also heightened secretion, and after their section, as demonstrated by Brodie and lately more completely by H. F. Wood, of Philadelphia, even the most irritant cathartics fail to act.

D. The splanchnic nerves are the restraining nerves of the stomach and intestines. They are so, probably, through their being also the vaso-motor nerves of the intestinal tract. Their section, as the experiments of Moreau proved, causes increased secretion and movement; in other words, corresponds nearly in effects to the irritation of the vagi.

Would not the following theory, then meet the exigencies of the case, namely:—

That the cholera poison or irritant acts with special force on the places where it is most concentrated, namely, the gastric and intestinal mucous membrane; that there its first action would probably be on the local ganglia, producing, we may suppose (since the existence of vaso-dilators is not yet proved) a local vascular spasm, which soon exhausts itself, and is succeeded by relaxation of the walls of the vessels, through temporary paralysis of the splanchnic nerve, resulting in strong congestion. This would cause greatly increased transudation into the alimentary canal and heightened peristaltic action. Moreover, the vagus, which, as above said, represents the sensory nerve of the stomach and bowels, would undoubtedly be irritated, hence causing increased movement of the bowels. The possibility of

the phenomena of irritation of the vagi and splanchnic paralysis occurring at once from the same cause can be imagined when one considers how much sooner the contractility of small muscles of the vessels innervated by the splanchnic would probably be exhausted than that of the larger constrictor muscles of the bowels. The poison, if absorbed to some degree into the circulation, could cause directly (or, if not absorbed, by reflex action) spasm of vessels remote from the seat of its extreme and paralyzing action, namely, the peripheral and pulmonary vessels. The blood, then, almost stagnating in the large central vessels and driven from the systemic arteries and left heart by their continued contraction, would accumulate in the right heart and pulmonary arteries. Hence the carbonic acid would increase and the oxygen diminish in the blood, and both of these circumstances have been found by experiment to increase peristaltic action. Finally, from prolonged irritation the vagus becomes paralyzed, and the stomach and bowels cease to act, and the left heart, not having blood enough to contract upon, and suffering also in its nutrition from the condition of the coronary arteries becomes paralyzed, or else the brain becomes oedematous, and convulsions occur. In cases that recover we may suppose that much of the poison having been eliminated, or having worn out its effects, or lost its activity, relaxation succeeds the spasm in the exhausted muscular walls of the peripheral and pulmonary vessels, while those of the abdomen, after long dilatation, relieved of their load by the equalization of the circulation, gradually recover their tone. So much for hypothesis as to the method of production of this pathological disturbance of equilibrium occasioning the alarming symptoms; of the fact we may feel reasonably sure.

*Treatment.*—The most ardent advocate of expectancy would admit that were it possible to remove the condition upon which all these phenomena depend, instead of trying to repress them individually, the former course would be as much more wise and desirable than the latter as the mending a leak in a roof would be than the constant renewal of the rain-spoiled wall-paper, plaster, and carpets.

I think it is not too much to say that we know enough of the main pathological condition to justify us in attempting to treat it directly, and that the newer treatments that have aimed at this object seem to have had success enough to justify a continuance of them. Certainly no patient looks a more unpromising subject for treatment than a child in advanced collapse from cholera infantum, and yet the change from all but death to life that may occur in a few hours, should reaction be brought about, is a fact as encouraging as it is surprising.

Steiner, in his excellent little hand-book of children's diseases, says of this disease, "Let

the physician treat early and actively; inactive expectancy is nowhere more punished than here."

*Prevailing Treatments.*—Before speaking of the modes of treatment that seem most indicated by the known and suspected pathological conditions and to have stood the test of experience, I will briefly allude to those more in vogue, purposely omitting prophylactic treatment as a branch which opens too wide a field for the limits of this paper. In what follows, for reasons before mentioned, I shall speak of the choleraic condition, whether from sporadic or epidemic causes, as essentially the same state, and remedies effective in the worse form would probably, *a fortiori*, promise even more in the milder form.

Too many of the treatments proposed are symptomatic in the narrowest sense of the word. This is not true, however, with regard to the old *eliminative* treatment, which was at one time popular on theoretical grounds in the evacuant stage. Dewees is dissentingly quoted by Churchill as recommending "warm water to encourage the puking and enemata of warm water to clear the bowels," and even at present Goldbaum, a German writer, goes so far as to maintain that transudation is a favorable occurrence, and not to be interfered with. It is difficult to see, with the now commonly accepted theories of the emetocatharsis being due to an irritant, organic, or inorganic, working specially on the intestinal tract, why this is not a conservative process by which the body endeavours to rid itself of the offending presence. It is not improbable that it is so to a certain extent, but clinical experience shows that this process may continue until it becomes the main source of danger.

Energetic diaphoresis is frequently recommended at the very beginning of the attack.

Either at the outset or after one artificially produced catharsis, almost all writers recommend opiates to check the discharges, some combining them with astringents, and some with chalk or lime-water, on a theory that an injurious acidity prevails in the alimentary canal. These are continued, even in large quantities, into the stage of collapse.

Calomel was until very lately almost universally given in the first stage, with a view that it either was, or ought to be, beneficial in some way. The medical adviser, like Holme's Rip Van Winkle, finished his directions thus:—

"Last with a dose of cleansing calomel,  
Unload the portal system,—that sounds well!"

Niemeyer, who considers it a sheet-anchor in cholera infantum, thinks that its good effect is only to be explained by its power to arrest decomposition and hasten the removal of irritating ingesta. Leube, in Ziemssen's *Cyclopædia*, recommends it as an efficient cathartic. Meigs and Pepper hold that it acts in the large doses

commonly given as a powerful sedative, too powerful, they urge, for a depressing disease.

Subnitrate of bismuth in large doses is much recommended to allay irritation by its mildly astringent and sedative action. Small doses of nitrate of silver are tried with similar object.

Hydrochloric and sulphuric acids, the latter combined with ether as the elixir Halleri, carbolic acid, and benzoïn are all recommended on antiseptic grounds.

Chloral hydrate, has been given by subcutaneous injection for its sedative effect. Of its good results more will be said later.

Now all writers recognize the importance of water, but many fear to give it in any other form than ice pills.

Spice poultices or sinapisms to the abdomen are recommended to check vomiting, and Niemeyer urges the application of frozen compresses to the belly.

In the stage of collapse most authors advise alcoholic stimulants, usually the most rapidly diffusible ones, to be given frequently, in small doses, together with opiates, if the discharges persist.

Warm or hot baths have been recommended in this stage, sometimes with the addition of mustard. Intra-venous injection of water, or salt and water, or of milk, have been resorted to in the worst cases, and even transfusion of blood.

Finally, the bad percentage of recovery when marked collapse has been reached, either in the sporadic or in the epidemic form, under almost all treatments, has led some writers to believe that the patient has the best chance of recovery who is let alone to wait for the natural turn of the disease, should his strength hold out, and only given a little ice, with perhaps mild opiates, and very thin, bland nourishment.

In the third, or reactionary stage, great care is advised in the administration of nourishment and stimulants, for fear of occasioning relapse or favoring secondary inflammations of the bowels or other organs.

No writer of any merit on cholera infantum fails to notice the main importance of dietetic treatment, but ideas on this subject differ widely. Niemeyer urges, as of primary importance, the necessity of absolute withdrawal of nourishment for a time, urging that whatever is given before the irritant has left the stomach will surely undergo abnormal decomposition and increase the mischief. Few others dwell on this point, but, if the child is being brought up by hand, recommend either barley-water or some similar mild farinaceous nourishment, or else beet-juice, chicken-water, or finally raw beef, scraped and perhaps moistened with red wine. Others recommend artificial foods made with reference to the deficient power of a child's digestive fluids to convert starch into dextrine, in which that transformation has been outside the body.

*Treatment Recommended.*—Now if the views set forth in the earlier part of this paper fairly represent the pathological facts, what would be a rational treatment of the choleraic state?

Waiving the question of prophylaxis and its corollary, the question how to directly destroy or neutralize the organic irritant (if such exist) after its introduction into the body, the first indication is to correct the dangerous and unfair distribution of the blood in the body, to which the purging, vomiting, cramps, and coldness, seem to be directly due, and later the greater danger of coma, convulsions, or paralysis of the heart.

Second. If we fail in the first attempt, or do not succeed until late, we should supply the water and perhaps also the salts drained from the blood, as the thickening of the blood would prevent the good effects of the natural turn of the disease, should we have to wait for that, and perhaps dispose to various organic lesions.

Third. We should attend to the general hygiene, diet, etc., of the patients.

As to the first indication, the problem is how to cause dilatation of the peripheral vessels and contraction of the overloaded abdominal ones. If we had any means of getting directly at the splanchnic nerves, we could probably by galvanization of them directly cause the contraction of the mesenteric vessels. Ludwig and Thiry found that after section of the spinal cord in the neck, whereby dilatation of the mesenteric vessels was caused, galvanization of the lower segment would cause extreme contraction of them. Possibly galvanization applied over the middle dorsal region of a patient might produce the same effect. Chapman maintains that he can occasion it by ice-bags applied to the spine, which he uses to check diarrhoeas and reflex vomiting.

Brückner, a German writer, claims that cold sand-bags of moderate weight laid on the abdomen of cholera patients, mechanically check the access of blood to the abdominal vessels and favor its escape. Transudation is thus hindered, and perhaps absorption is favored; moreover, the peristaltic movements of the bowels are not so free. These sand-bags might be used carefully, with hot applications to the extremities.

We have a much better chance of success, however, if we try to unload the abdominal vessels by relaxing the peripheral ones by means of strong derivatives applied to the surface. Steiner strongly urges baths of from 99° to 104° Fahr. in the algid stage, combined with stimulants internally, and Leube, in Ziemssen's Cyclopædia, recommends the same. The distinction, too often neglected, between a warm bath and a hot bath is of vital importance here. No bath of less than 99° would be desirable. A writer in an English journal within a year or two, whose name I have lost, mentions his very gratifying success in treating the algid stage of

Asiatic cholera by prolonged hot mustard packs. In accordance with this plan I treated three cholera infantum patients last summer, who were rapidly cooling off and assuming the characteristic pinched appearances of collapse, by suddenly wrapping them to the chin in cloths wrung out in hot water and mustard, with a blanket outside, and while thus mummied, feeding them with plenty of ice-water and a little brandy. The pack was kept up half an hour or more, and during that time the change in the child's appearance was remarkable; the color and warmth returned to the surface, the tissues filled out, the features lost their pinched and old look, a natural perspiration broke out, the vomiting ceased, and the discharges grew less frequent. The mustard sheet was then withdrawn, but the child left enveloped closely in the warm, moist blanket. The pack in one instance had to be renewed at intervals, as a tendency to relapse manifested itself after some hours, but the condition of all mended in marked manner after the first application, and all made a good recovery.

With regard to medication, if the choleraic state last any length of time, the blood must necessarily be altered by its drain of water and salts. Water, then, is the first medicine indicated, and should be constantly given in the form of ice-pills or spoonfuls of ice-water. Small enemata of slightly salt water immediately after a dejection might help to supply the lost fluid. Should vomiting and purging go far enough to cause a fear that the blood was becoming too much thickened, intra-venous injections of water should be tried, and if it were thrown in at a temperature of 100° the heat might help relax the surface vessels. Milk and blood have also been used, but water seems more indicated, as in this disease the blood loses little albumen and no corpuscles.

As to the administration of drugs by the mouth, the fact of the probable very slight power of absorption at that time is usually overlooked. It is found that belladonna introduced into the stomach in large doses will not dilate the pupils. The medicines, stimulants, and food, then, can have little power in the present condition, nor yet help to bring on reaction, and if often repeated they may, when reaction sets in, be all greedily absorbed at once, and so do great harm, a fact to which Meigs and Pepper very properly call attention with regard to pouring in opium and alcohol in the algid stage. Internal administration of antiseptics has not so far seemed to fulfil the expectations of its advocates. As for calomel, it seems hardly indicated in the pure choleraic stage, unless there is the best reason to believe that some crude ingesta still present in the intestine demand a cathartic.

In the *Practitioner* of July, 1875, was a very striking article on the use of subcutaneous



injections of chloral in the evacuant or algid stage of cholera, by Surgeon A. R. Hall, with accounts of cases treated by him and Mr. Higginson, another English army surgeon. The number of cases treated by these two gentlemen was large, and the onset severe and alarming, but they lost hardly a case. They injected two-grain doses of chloral, diluted with ten times as much water, into the arms and legs of patients, some in extreme collapse, and in almost every case good and speedy recovery ensued. Few patients had more than eight to ten grains in all. Mr. Hall's theory was that the vascular condition was due to extreme vasomotor irritation, and that the usual stimulant treatment only heightened the difficulty, as was shown by its small percentage of recoveries, sometimes only eighteen per cent. So he looked about for a sedative to relax the general spasm, and tried chloral with the brilliant results above mentioned. It is interesting to know that the government in India have taken pains to publish and circulate Mr. Hall's happy experience in the treatment of cholera collapse. His method seems to be well vouched for, and I see no reason why it should not be applicable to the choleraic state in children, if the injections were given progressively and carefully watched.

One word, in conclusion, as to babies' food, though that subject has been so well treated at recent meetings of the society that it is almost superfluous to say a word more. There is a point which I wish to allude to, namely, the great popularity among the rich and poor of the nursing bottle with the flexible tube. It is an invention of which Herod might have been proud. It is always in the baby wagon or the crib, in hot sun or close air. The child falls asleep with its nipple in his mouth. The mouth is usually never washed; the bottle and tube are, "with scalding water and with soda," so the mother says if you ask. Smell it, and see what you think. Take a parallel case. What prospect could a man have of immediate and satisfactory recovery from cholera morbus, or even dyspepsia, who should eat soup, freshly made perhaps, but out of a tureen which had been standing half a day with the remains of yesterday's soup in it, in a close room with a temperature of 90°; who, moreover, should never rinse out his mouth nor allow time for digestion, but should go to sleep with a piece of bread soaked in soup in his mouth, and, if colic or oppression caused him to complain on waking, should at once take more soup out of the unscaled tureen? This is not an agreeable picture, but it is a fair analogy. Is a teething baby's stomach stronger than a man's, that the doctor should tolerate the form of nursing bottle which encourages and contemplates a management of his diet exactly parallel to that in the unattractive picture I have just drawn?—*Boston Medical and Surgical Journal*.

## THE CANADA MEDICAL RECORD

### A Monthly Journal of Medicine and Surgery.

EDITOR:

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MONTREAL, OCTOBER, 1876.

#### TO CORRESPONDENTS AND EXCHANGES.

The new Post Office in Montreal being now in use, the number of our Box is 356, instead of Drawer 56, as it was in the old Post Office. Will correspondents and exchanges kindly make a note of this?

#### TO OUR SUBSCRIBERS.

We have been somewhat delayed in the issue of this number, waiting for paper. As our readers will notice, we now cut and trim the *Record*, which, in our opinion, gives it a neater appearance, and will doubtless be found convenient as well. This change, necessitated the manufacture of a paper specially for us, and a delay in its receipts has compelled us to postpone our issue a few days. In our September number we enclosed accounts to all our country subscribers, and we are gratified to be able to say that quite a number forwarded the amount promptly. To them we return our thanks, and we believe they will receive the *Record* with a clearer conscience, now that they have squared their accounts with us. Some, however, have neglected to respond to our appeal. To them, we again enclose a gentle reminder, and we earnestly ask them to remit at once. We have payments to make, and, as the amount owing by each is small, we again remind them to do by us as they would wish to have done to them,—remit at once, and return the account, so as it can be receipted.

#### MONTREAL MEDICAL SCHOOLS.

The Medical Faculty of McGill University opened on the 2nd of October, by an introductory lecture from Professor Ross. The attendance of students is about the same as last year, in the neighborhood of one hundred and twenty. Bishop's University Medical Faculty opened their Sixth Session on the 4th of October, with an introductory lecture from Professor Leprohon. The attendance of students

is in excess of last year, about forty being in attendance. The supply of anatomical material is said to be good, although the inspector of anatomy is almost a myth, and *does not do his duty*.

The Victoria Medical School opened on the 2nd of October, with an Introductory Lecture by Professor Peltier.

#### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

On the 13th of October, the Annual Meeting of this Society was held, when Dr. Godfrey, the retiring President, delivered his valedictory address. The following were elected officers for the ensuing year: President—Dr. George E. Fenwick. First Vice-President—Dr. Francis W. Campbell. Second Vice-President—Dr. Angus McDonnell. Secretary—Dr. Arthur A. Browne. Treasurer—Dr. Alexander Proudfoot. Council—Dr. S. B. Schmidt, Dr. R. A. Kennedy, and Dr. George Ross.

#### HYPODERMIC INJECTIONS OF COLD WATER.

Some time ago M. Lélut sent a communication to *L'Union Médicale* on the relief of pain by hypodermic injections of cold water. Lately Dr. Dessau, of New York, has been giving a trial to this simple remedy to seven cases that came under his care. They were nearly all cases of articular rheumatism. In all, the pain appeared to be almost instantaneously relieved by the injection, and in several instances it did not return. Dr. Dessau, thinking that the relief obtained may have arisen from the mere puncture of the skin, as in acupuncture, inserted the needle in the manner adopted in that operation, but the effect was nothing to be compared with that experienced after the injection of cold water. In one case Dr. Dessau injected as much as ten syringefuls of water at one visit, so that there is no danger from the quantity employed; and he thinks this will be found a valuable and ready means of relieving pain, especially when it is not desirable to resort to the use of morphia and other narcotics.

It is very probable that this plan of treatment will often be found efficacious in the relief of that pain which is so characteristic of neuralgia and various forms of rheumatism. And we base this presumption not so much upon the result of Dr. Dessau's experiments, which are not sufficiently numerous to enable us to form a correct opinion, but upon the *a priori* consideration that the sudden

applications of intense cold, such as that afforded by snow, ice, and freezing mixtures, has often given speedy and permanent relief in cases of neuralgia that have resisted all ordinary kinds of treatment.

#### HOW TO MAKE LEECHES BITE.

Every practitioner must have found how difficult it is at times to make leeches bite, and perhaps the following method, which we take from a recent number of *Le Progrès Médical*, may interest our readers:—

"In order to make leeches 'take' immediately we should put them into a glass half filled with cold water. We should next carefully bathe with warm water the part to which we wish to apply the leeches, and then quickly apply the glass to the skin. By this means the leeches will attach themselves to the skin with surprising rapidity, the patient merely feeling one simple bite. When all the leeches have taken, the glass should be moved in such a manner as not to wet the patient. To accomplish this it will be sufficient to receive the water at the most depending part into a sponge. If we wish to apply the leeches to only a very limited surface, all we need do is to place on the glass previously to its application a sheet of strong paper with a hole cut in it of the required size."

#### MILK OF MAGNESIA.

We have received from Messrs. Devins & Bolton, of Apothecaries Hall, next to the Court House, Montreal, a sample of "Milk of Magnesia," for which they have been appointed agents for the Dominion.

It is the only perfect hydrate, or complete combination of Magnesia and water, *by a new and improved process*, and is not, as many suppose, calcined Magnesia triturated and suspended by a mucilaginous or other auxiliary body. Microscopic examination of it, when mixed with distilled water, discloses a uniform cloudiness, but no separate particles of the alkali. Being a hydrate, it is far more efficacious than the calcined and carbonated preparations of Magnesia, which are insoluble, since the hydrate form is that in which combinations are most readily effected in the stomach. In illustration, take the action of the Hydrated Sesqui-Oxide of iron, the antidote to Arsenic, which it decomposes and then unites with, as Arseniate of Iron. The Lactate of Lime, the Phosphates and other hydrates, exemplify the above fact. It is claimed that the Milk of Magnesia combines with and

neutralizes the Lactic, Lithic, and Uric Acids, which are generally admitted to be the exciting causes of Gout, Rheumatism and Gravel. It is, moreover, susceptible of the most perfect homœopathic distribution, since a single drop amalgamates completely with a tumblerful or more of water.

The use of Milk of Magnesia is free from the risk attending that of the undissolved Magnesias, which form hurtful concretions in the stomach and bowels—a fact which renders them peculiarly unsuitable to the delicate infant organism. The perfect smoothness and milk-like taste of this Magnesia, on the contrary, make it the best of all Antacids, and whether used for children or adults, physicians who test it will find that this hydrate possesses all the medicinal properties of Magnesia in a much higher degree than the calcined and carbonated preparations of that important alkali, without any of the above objections.

In calling the attention of the profession to the Milk of Magnesia, the proprietor claims to present it with an entirely new therapeutical agent, which both Physicians and Pharmacists will readily appreciate.

Milk of Magnesia is sold in 8 and 20 ounce bottles; the latter size will be found very convenient for dispensing. It is compatible with all compounds and preparations in which the ordinary Magnesias have hitherto been used.

#### PERSONAL.

Dr. Lawrence (M.D., Bishops College,) 1873, has removed from Marbleton, Que., to Robinson, Bury, Que.

Dr. Gardner, Professor of Medical Jurisprudence McGill University, returned from his European trip by the Allan mail steamship "Sardinian," on the 23rd of October. Dr. Gardner was absent six months.

Dr. Sheridan, (M.D., Bishops College, 1876,) has gone to Gaspé Basin to settle.

Dr. Molson, M.D., McGill College, 1875, has commenced practice at No. 10 Phillips square, Montreal.

Dr. Costigan (M.D., Bishops College, 1874,) has, owing to ill health, been obliged to desist from practice at Indianapolis, Indiana, and has proceeded to Colorado, where he intends passing the winter.

Dr. Marston, (M.D., McGill College, 1874,) has accepted a position as Surgeon, on the Allan Mail line.

Professor Lister, of Edinburgh, passed through Montreal and visited Quebec and the Saguenay, previous to attending the International Medical Congress. He intended going over the Pacific Railway to San Francisco, before returning home. Dr. Hare, of London, passed through Montreal, after the Congress was over; as did Dr. Barnes, of London, and Mr. Joliffe Tuffnell. Dr. Barnes remained one day in Montreal, Mr. Tuffnell remained two.

The Model City of Health, proposed by Dr. Richardson, of London, is about to be tried practically. A site has been secured on the coast of Sussex, England, where the city will be laid out.

#### THE CENTENNIAL MEDICAL CONGRESS.

This Congress, looked forward to with the most anxious feelings, not only by the medical profession of the City of Philadelphia, but of the United States, opened at Philadelphia, on Monday, the 4th of September last. The beautiful, although somewhat sombre chapel of the University of Pennsylvania, at the hour of noon on that day, presented a scene which those whose privilege it was to be present will not soon forget. It was filled to overflowing by an audience, which was in every respect a representative one, for there were in attendance medical men from almost every quarter of the globe. After prayer by the Right Reverend the Bishop of Pennsylvania, the venerable Professor Gross rose, and delivered the following address of welcome:—

My colleagues have confided to me, as the President of the Centennial Medical Commission, the agreeable and honorable duty of opening this International Medical Congress, so long the object of their solicitude and earnest labour. In their name, then, as well as my own and that of the entire medical profession, whose great heart this day throbs in unison with ours, I extend to you our right hand, and bid you a thrice cordial welcome to the City of Brotherly Love. The occasion which has brought us together this morning is one of no ordinary kind; it is one also which has been long and, I may say, anxiously anticipated. It might, perhaps, seem ungracious if I were to tell you how much time and labour have been bestowed by the Commission through its Committee of Arrangements upon the organization of the Congress; how often they met to devise plans and to interchange views; how earnestly and thoughtfully they performed their works: in a word, how faithfully and conscientiously they



discharged the great trust confided to them by the different medical bodies of the City and County of Philadelphia, in which the Congress originated nearly two years ago. \* \* \*

It is at all times a source of gratification to welcome friends, especially when they are, united by the bonds of a common brotherhood, or an identity of interest; but on this occasion, so pregnant with important events, the feeling is vastly heightened by the fact that we have assembled around us brethren not only from every section of this great continent, but from various foreign climes—from Europe, the far East, from Japan and China, the Islands of the Pacific, South America, Mexico, the West Indies, and I had almost said, from every country in the world. \* \* \*

Men laying aside for a while their ordinary pursuits, crossing vast continents and perilous seas, congregating to unite with us in celebrating our first Medical Centennial, in interchanging cordial salutations, in deliberating upon the best means of promoting the holiest and dearest interests of our profession, and in laying their contributions, the accumulations of years of study and observation, upon a common altar for the common good! In its wide range, the present Congress is without a parallel. Similar bodies have repeatedly met, but none on so grand a scale or with such a cosmopolitan outlook. \* \* \*

We are upon the threshold of a new century. One hundred years have passed away since the grand old bell upon Independence Hall announced to the world the birth of a new nation, and liberty not only to our own citizens but to all peoples of the earth. The century that has just elapsed was the most wonderful in all that pertains to human progress, to discovery, to invention, to improvement, to refinement, and to intellectual culture; in a word, to all that ennobles and exalts human nature in its various aspects and phases, that has been vouchsafed to man since God said, "Let there be light." The science of medicine has been completely revolutionized within our own days. The saying, "Old things have passed away, behold all things are new," has literally been fulfilled. The microscope, chemical analysis, clinical observation, and experiments upon the inferior animals, are leading on the medical mind with wondrous velocity in the pursuit of knowledge, and adding daily new facts to our stock of information far beyond what the wildest fancy could have conceived of even a third of a century ago. Dogmatism, once so dominant in the schools, has ceased to exist, and no unacknowledged theories are any longer received by the scientist. Facts, resting upon the broad basis of observation and experiment, repeated and varied in a thousand ways, alone are relied upon as worthy of acceptance and as safe guides in practice. Hippocratic medicine is the order of the

day. Everything bows before its divine behests.

In every corner of the habitable globe penetrated by the light of civilization, busy, active minds, endowed with high culture, and actuated by the noblest resolves, are at work, exploring the mysteries of disease, and devising means or methods of treatment for the relief of suffering and the prolongation of life. The busy bee was never more industriously engaged in gathering honey from the flower of the field than the modern physician is in gathering knowledge at the bedside of the sick, and garnering it for future use. Much of what is considered by many as established must be reviewed in the light of modern science; new avenues must be opened, and the ball, composed of myriads of threads more delicately formed than any ever spun by Penelope, must be pushed onward and upward by the united efforts of the medical profession in all parts of the world. How far the Centennial International Congress shall promote these desirable objects time alone can determine. It may safely be predicted that, if it do not fulfil all the promises of hope that have been formed of it, it will accomplish a vast deal of useful work, and thus afford the world an earnest of its interest in the advancement of scientific medicine and in international unity. Science can have no higher mission than that of strengthening the bonds and securing the co-operation of its votaries in various parts of the globe, assembled to deliberate upon everything calculated to promote its holiest interests.

And now that the labour of the Centennial Medical Commission is completed, it only remains for the Congress, which I now declare open, to perfect its organization by the election of its own officers.

A Committee of thirteen delegates was appointed to nominate officers for the Congress. They made the following report, which was unanimously adopted:—

*President*, Dr. S. D. Gross, Philadelphia.

*Vice-Presidents*, Dr. Paul F. Eve, Tennessee; Dr. Jolliffe Tuffnell, Dublin; Dr. W. L. Atlee, Philadelphia; Dr. C. Large, Copenhagen; Dr. J. B. Johnson, St. Louis; Dr. T. Semeleder, Vienna; Dr. Hunter McGuire, Virginia; Dr. Johan Hjort, Christiania; Dr. T. G. Richardson, New Orleans; Dr. William H. Hingston, Montreal; Dr. J. P. White, New York; Dr. H. Miyake, Japan; Professor N. R. Smith, Baltimore; Professor Rudnen, St. Petersburg; Dr. J. M. Toner, Washington, D. C.; Professor Hueter, Griefswald; Dr. G. L. Collins, Rhode Island; Dr. R. F. Hudson, Australia; Dr. H. Gibbons, California; Dr. P. D. Basieux, Belgium; Dr. N. S. Davis, Chicago; William Adams, Esq., London, England; Dr. L. A. Dugas, Georgia; Professor Simpson, Edinburgh; Dr. J. K. Bartlett, Wisconsin.

*Honorary Vice-Presidents*, Surgeon-General Barnes, U.S.A., Surgeon-General Beale, U.S.N.

*Secretary-General*, Dr. I. Minis Hays.

*Assistant-Secretaries*, Dr. William B. Atkinson, Dr. R. J. Dunglison, Dr. R. A. Cleeman, Dr. W. W. Keen, Dr. Bertolet.

*Section of Medicine*, Chairman, Professor A. Stillé; Secretary, Dr. J. Ewing Mears.

*Biology*, Chairman, Professor J. C. Dalton, of New York; Secretary, Dr. J. Tyson.

*Surgery*, Chairman, Professor Joseph Lister, of Edinburgh; Secretary, Dr. J. H. Packard.

*Dermatology and Syphilology*, Chairman, Dr. J. C. White, of Buffalo, N.Y.; Secretary, Dr. A. Van Harlingen.

*Obstetrics*, Chairman, Professor Barnes, of England; Secretary, Dr. William Goodell.

*Ophthalmology*, Chairman, Dr. R. Brudenell Carter, of England; Secretary, Dr. J. Green.

*Otology*, Chairman, Dr. L. Turnbull; Secretary, Dr. C. H. Barnett.

*Sanitary Science*, Chairman, Dr. Stephen Smith; Secretary, Dr. E. M. Hunt.

*Mental Diseases*, Chairman, Dr. J. P. Gray; Secretary, Dr. W. Kempster.

On the following day an additional report was received from this Committee, completing their list of nominations.

*Committee on Publication* (with power to choose its chairman and an editor), Dr. J. Ashhurst, jun., Dr. R. J. Dunglison, Dr. William Goodell, Dr. J. H. Hutchinson, Dr. Caspar Wister.

*Treasurer*, Dr. Caspar Wister.

*Vice-Presidents of the Sections: Medicine*, Dr. R. P. Howard, Canada; Dr. J. J. Woodward, U.S.A. *Biology*, Dr. A. Flint, jr., New York; Dr. F. W. Campbell, Canada. *Surgery*, Dr. J. A. Grant, Canada; Dr. J. Ashhurst, jun., Philadelphia. *Dermatology and Syphilology*, Dr. S. Englested, Copenhagen; Dr. E. Shippen, U. S. Navy. *Obstetrics*, Dr. A. Simpson, Edinburgh; Dr. W. H. Byford, Illinois. *Ophthalmology*, Dr. William Thomson, Philadelphia; Dr. W. H. William, Texas. *Otology*, Dr. A. Buck, New York; Dr. C. J. Blake, Boston. *Sanitary Science*, Dr. J. S. Billings, U.S.A.; Dr. H. B. Baker, Michigan. *Mental Diseases*, Dr. J. Ray, Philadelphia; Dr. E. Grissom, New Orleans.

It will be noticed that in the above reports Canada was specially honored. Dr. Hingston, our worthy Mayor, was chosen one of the Vice-Presidents of the Congress, while Dr. R. Palmer Howard, of Montreal, Professor of the Theory and Practice of Medicine in McGill University, was elected one of the Vice-Presidents of the

Section of Medicine. Dr. James A. Grant, M.P., of Ottawa, was elected one of the Vice-Presidents of the Section of Surgery, and Dr. Francis W. Campbell, Professor of Physiology in Bishop's University, was elected one of the Vice-Presidents of the Physiological Section.

The Congress being thus fairly inaugurated, adjourned to meet in sections, and it was here that the real work was done. The plan daily adopted was the following: The Congress met at ten a.m., and received reports from the Sections. Then there was read at each of these sessions a paper on various medical topics. Such as an address on Medicine from Dr. Flint, sen., of New York; one on Hygiene from Dr. Bowditch, of Boston; an Address on Surgery, by Professor Paul E. Eve, of the University of Nashville, &c. &c. At one o'clock the Congress adjourned to take lunch, which was daily served in a large room in the basement of the University. At two o'clock the Sections met and usually continued in session till six o'clock, and sometimes this hour was exceeded. The Sections which attracted the largest attention were the surgical, the obstetrical, and the medical. All of these had constantly large audiences. In the Surgical Section, Professor Lister, its Chairman, was the observed of all observers, and received a most cordial reception. On the second day he illustrated his method of antiseptic dressing and explained most fully the basis as well as the superstructure of his germ theory. From the opening of the section, at two o'clock, till its close, past six—with but a short interval of less than an hour, which was taken up by a few other speakers—Professor Lister occupied the time of the Section. No greater compliment could Professor Lister have received than was accorded by the close attention which was given him during his three hours of speaking. In the discussion of the system of antiseptic surgery, there was an evident wandering on the part of many, if not most, of the speakers, and it devolved upon a distinguished Canadian, Professor Canniff, of Toronto, to more than once cause them to face about. In this Section many valuable papers were read, and the discussions were intensely interesting. Professor Lister made an excellent Chairman. He has aged somewhat since we attended his classes at the University of Glasgow, in 1861, but he is still fresh and hearty, and will, we hope, be long spared to

battle for his favorite theory. In the Obstetrical Section, Dr. Barnes, of London, England, occupied the chair. He is a thorough Englishman in appearance—rather under-sized, with an open, pleasant face, and is a plain, pointed and honest speaker. More than once he saved his Section from committing serious blunders—of endorsing too dogmatically conclusions arrived at by the readers of papers. His opinions carried, as a rule, the Section with him. This Section, perhaps, embraced as many, if not more, able men than any other Section—here was constantly to be seen and heard such men as Professor Simpson, of Edinburgh, Dr. Dunlop of the same place, the two Atlees of Philadelphia, Hodge, Byford, and Fordyce Barker, Canada, was well represented by the venerable Dr. Hodder of Toronto, Dr. Thorburn of the same place, and by Dr. Trenholme of Montreal, the latter gentleman reading a most interesting paper. The attendance of some twenty-seven ladies, students of the Women's College of Philadelphia, in the section was a novelty which, we confess, we failed to appreciate. We gave our seat once to a lady dressed in the height of fashion, with a perfume equal to that to be found in Rimmel's store in the Strand of London, who unblushingly listened to discussions which almost made us blush for her. The Medical section we were only able to visit once, but perhaps it was, in the matter of able debaters, equal, to say the least, to any other section. Dr. R. Palmer Howard, of Montreal, was in close attendance on this section, once occupied the chair, and read a paper on Progressive Pernicious Anemia. Dr. N. S. Davis, of Chicago, took an active part in this section, and generally on the right side. There is no more active worker in the United States than Dr. Davis, who wears well, looking as wiry as when we first met him eight years ago at Toronto, attending a meeting of our Canadian Association. The other sections were moderately well attended, and interesting papers were read, but as already mentioned, the interest of the Congress was centered in the surgical, medical and obstetrical. The work of the various sections closed on Friday evening, the 8th of September, and on the morning of the 9th, the Congress met in general session for the last time. It was a time of pleasant interchange of compliments, in which the

representatives from Great Britain and from Canada took a prominent part. Dr. Hare, delegate from the London Medical Society, and Dr. Brudenell Carter, ophthalmic surgeon to St. George's Hospital, London, were the spokesmen for the British representatives; Dr. Grant, M.P., of Ottawa, in a neat speech spoke upon behalf of the delegates from Canada, and presented a series of complimentary resolutions which had been adopted by the Canadians in attendance on the Congress. Shortly after noon the Congress adjourned, thus terminating what was perhaps the most remarkable gathering of medical men which has ever been held.

We have thus given an idea, we trust, of how the Congress performed its work, but as all work and no play is not a good thing, there was arranged a number of very pleasant entertainments. On the night of the first day of the Congress a reception was given the delegates by the profession of Philadelphia at the Judges' Hall on the Exhibition grounds. It was very largely attended, and was a pleasant way for the delegates to become acquainted. It was brought to a conclusion by a supper in the American Restaurant, Exhibition grounds. On Tuesday evening elegant receptions were held at the houses of Drs. Wilson and Strowbridge, and on Thursday evening the well-known publishers Henry C. Lea and J. P. Lippincott held similar entertainments. On Friday evening the grand dinner of the Congress was held, at which over two hundred were present.

Among the distinguished foreigners who were present may be mentioned:—

Mr. William Adams, President of the Medical Society of London; Dr Robert Barnes, Obstetric Physician to St. George's Hospital, London; Dr. Gregorio Barroeta, San Luis Potosi, Mexico; Dr. T. Lander Brunton, London, editor of *The Practitioner*; Mr. R. Brudenell Carter, Ophthalmic Surgeon to St. George's Hospital, London; Mr. Richard Davy, Hon. Sec. of Medical Society of London; Dr. Pierre Debaisieux, Prof. in University of Louvain; S. Engelsted, M.D., Physician in Chief of Copenhagen Hospital; J. A. Estlander, of Helsingfors, Finland; Dr. M. W. C. Gori, of Amsterdam; Edmund Hansen, M.D., President of Medical Society of Copenhagen; Prof. Johan Hjort, of Christiania, Norway; Dr. R. F. Hudson, of Ballarat, Australia; Prof. Hueter of Griefs

wald; T. Ishigouro, Tokio, Japan; Dr. C. Lange, Lecturer on Pathological Anatomy in University of Copenhagen; Mr. Joseph Lister, Prof. of Surgery in Univ. of Edinburgh; Dr. Mareas de J. Melero, Havana; H. Miyake, Prof. of Pathology in Med. Col. of Tokio, Japan; S. Nagayo, Director of Med. Col. of Tokio, Japan; Dr. G. Rawson, Buenos Ayres; D. Argyll Robertson, M.D., Edinburgh; M. Rudnew, Prof. of Path. Anat. in Medico-Chirurgical Academy, St. Petersburg; Dr. Leopold Servais, Antwerp; Dr. Alex. R. Simpson, Prof. of Obstetrics in Univ. of Edinburgh; Mr. Jolliffe Tufnell, President of Royal College of Surgeons, Ireland; Dr. W. A. Koukol de Yasnopolsky, St. Petersburg.

#### CANADA MEDICAL ASSOCIATION AND AMERICAN MEDICAL ASSOCIATION.

A meeting of the Joint Committee of Conference appointed by these two organizations was held at the Jefferson Medical College Philadelphia on September 2nd, at 12 o'clock, noon.

Present Drs. Edward H. Trenholme, J. A. Grant, F. W. Campbell, E. Robillard, of Canada; and Drs. H. J. Bowditch, E. Andrews, Samuel D. Gross, John T. Hodgson, and William B. Atkinson, of the United States.

On motion of Professor Gross, Dr. J. A. Grant of Canada was requested to preside; and Dr. William B. Atkinson, of the United States, to act as Secretary.

By request, the Secretary read the following communication, as explanatory of the Conference:—

“Moved by Dr. Grant, seconded by Dr. Hingson—

“That, in consideration of the best interests of medical science, it is desirable that a Medical Conference should take place between the American and Canada Medical Associations, at some central point, to be determined upon, and that the American Medical Association be advised as to the desirability of thus becoming more intimately acquainted, and affording an opportunity for the discussion of medical and surgical subjects on a common basis.

Which motion was unanimously agreed to, when Dr. Hingson, seconded by Dr. Botsford, moved:—

“That, in the event of such a Conference being

determined upon, it would be desirable that the Secretary of the Canada Medical Association notify the different members, so that they may take part in a manner worthy of the occasion, and in keeping with the best interests of medical science.

“Which motion was also unanimously adopted.

“A true Copy from the Minutes.

“A. H. DAVID, M.D.,

“General Sec. Canada Medical Association.”

Dr. Grant, in an able speech, explained more fully the desires of the Canada Medical Association.

The subject was then discussed by Drs. Gross, Bowditch, Andrews, F. W. Campbell, and Trenholme.

Dr. Andrews then offered the following Resolution, which was unanimously adopted:—

*Resolved*, That in the opinion of this Committee, the interests of medical science will be promoted by a consolidation of the American Medical Association and the Canada Medical Association in one body.

On motion of Dr. Gross, seconded by Dr. Andrews, it was unanimously

*Resolved*, That the President of the American Medical Association and the President of the Canada Medical Association be requested to embody this idea properly and emphatically in their addresses before their respective Associations.

On motion, the Conference adjourned, with thanks to the President and Secretary.

#### CHLORAL PLASTER.

For neuralgia, rheumatic pains, etc., use the ordinary emplastrum roborans, and powder it with the chloral. Apply the plaster to the affected part and leave it from twenty-four to forty-eight hours. When taken off the skin is found studded with vesicles; these are to be pricked with a pin, followed by a dressing with simple ointment. The pain vanishes long before the vesicles are dried up.

#### MARRIAGES.

On the 25th October, by the Rev. A. Deschamps, Vicar of Notre Dame, of Montreal, William Henry Mondelet, Esq., M.D., second son of the Hon. Justice Mondelet, one of Her Majesty's judges for the Province of Quebec, to Eliza Ellen Hitchcock, fourth daughter of the late John Hitchcock, Esq., of Sudbury, Suffolk, England, and sister to Mrs. James Worthington, of Montreal.

## Original Communications.

*Observations on some Cases of Injuries and Diseases of Joints*, by WILLIAM FULLER, M.D., Professor of Anatomy, University of Bishop's College. Read before the Medico Chirurgical Society of Montreal, October, 1876.

GENTLEMEN,—The report of a few cases of injury and disease of joints which I present to the Society to-night are such as occur in everyday practice, but which I hope are of sufficient interest to elicit useful discussion on this important department of surgery. They are drawn from memory, and will of necessity be imperfect in detail. I shall endeavor to be as accurate as possible in description, and to lay down the principles which guided the treatment.

Case 1.—A. P., butcher, aged 28 years, good constitution and temperate habits, was precipitated from a cart drawn by a runaway horse upon a stone road, with such violence as to cause a compound dislocation of the ankle. The sole of the foot was directed upward and inward, while the malleoli projected through a rent about four inches in length across the outer side of the joint. The bones were also forced through a woollen stocking, and the joint was filled with dirt, threads and small pebbles. Upon consultation with two neighboring surgeons it was concluded to amputate, but the patient was unwilling to submit without a trial to save his foot. I was glad to observe the result of conservation in so extensive an injury to a large joint; accordingly, after cleansing the wound and interior of the joint of all extraneous substances—which required time, care and patience—I adopted the principle laid down by Mr. Paget, as my guide in the treatment, “that the healing process is in the inverse to the amount of inflammation,” and that to relieve pain is to relieve a difficulty of nature. I gave  $\frac{1}{2}$  of a grain of morphia to relieve the shock, and waited for the first appearance of pain and heat. I found that it caused great pain to reduce the dislocation, so I left the foot nearly as I found it at the time of accident. The foot and leg was rested on a pillow with the sole directed inward and the synovial surfaces separated. Excitement commenced in twenty-four or thirty-six hours, which was met by cold wet compresses to the foot and leg frequently changed,

and tincture of aconite internally to moderate the circulation. As the heat and the sympathetic fever increased, I lowered the temperature of the body by frequent bathing and the leg by pouring water continuously over it; the wound was protected from the water by oiled silk. The means were increased according to circumstances by adding ice to the water and by cooling the blood thrown into the part by placing an intestine filled with pounded ice along the course of the femoral artery. Eight or nine days of this brought us to the climax of the acute stage, when we commenced to moderate the cold applications until in a few days we had returned to a wet cloth applied to the leg; morphia had been given at intervals to relieve pain, which was at times severe. During the acute stage the synovial membrane was red and swollen with very little secretion, and toward the end was covered with a diphtheritic looking membrane which, as the acute symptoms subsided, broke up and was discharged as flocculi in a semi-purulent serum. Starting pains frequently occurred followed by discharges from the joint. An abscess formed upon the inner side of the ankle, which was opened. The secretion from the joint finally lost its flocculent and semi-purulent character, and became a clear yellowish albuminous fluid.

When all acute symptoms had subsided, I commenced to draw the foot gradually into position by means of adhesive straps, desisting whenever pain or excitement was caused by pressing together the two tender surfaces of the synovial membrane. It required about a week or ten days to get the sole of the foot under the leg, and in about ten weeks my patient was able to walk quite well, there was no tenderness and only a slight thickening of the tissues about the ankle, and a slight impediment to the lateral movement of the foot. No lameness or halt could be observed in the gait. He has never had a return of inflammation, or any weakness of the joint, or any effusion of fluid into it.

Case 2.—S. S., aged 50 years, highly nervous and debilitated constitution, while scoring timber, struck the broadaxe into his knee-joint on the inner side of the patella. The cut was about three inches in length in a perpendicular direction. The edge of the axe was buried into the bone, and the finger could be easily passed into the joint. I placed the stave of a flour barrel

behind the knee and bandaged it to the thigh and leg, placed the limb in a horizontal position, and applied water dressings; the wound was left open to allow a free discharge. Recovery took place without any untoward symptom, and in a few weeks the joint was as good apparently as before.

Case 3.—A. P., aged 8 years, delicate looking girl, fell upon a broken glass bottle which made a transverse incision about 2 inches in length on the inner side of the patella. The finger passed freely into the joint while examining for broken glass. This case was treated and recovered, similar to the last. The joint is perfect, and no weakness remains. I have frequently seen the smaller joints of the fingers, the thumb and of the toes laid open, and allowed to heal without any attempt to approximate the edges of the wound. In very many instances good joints were obtained unless where the tissues were much crushed or the tendons divided, when the result was generally a stiff joint or very slight mobility; a great deal depending upon early and careful passive movement.

Some years since I saw a surgeon amputate all the fingers of the right hand because the joints were opened, when in all probability they might have recovered nearly as useful as ever if they had been tied up and left to nature. Extensive experience in minor accidents has taught me to let fingers alone no matter how unpromising they appear at first, nor do I consider that open joints or compound fractures of the heads of bones require a sacrifice of the parts. Encouraged by the above results I have in a few cases opened diseased joints in which there was effusion, but first I will present to your notice one case in which a happy result was obtained by the injection of iodine.

P. O' B., aged 14 years, had injured his knee while at play, about three months previous to consulting me. He gave the history of an acute attack of synovitis followed by effusion which partially subsided at times. He had used various linaments and hot fomentations. The condition when he applied to me was as follows: Considerable effusion in the joint, ligaments very much relaxed, so that the tibia could be freely moved laterally on the femur, patella displaced about three quarters of an inch in front of the condyles by the effusion. I injected about half a drachm of strong tr. of

iodine with a hypodermic syringe into the cavity of the joint, without withdrawing any fluid. I directed the point of the syringe into the middle of the fluid, and then agitated the joint by rubbing it roughly and allowing him to walk home a distance of half a mile; he was directed to keep quiet, apply a flannel bandage, and to bathe the knee with hot water if pain occurred—no excitement followed this procedure. About one month passed and he reported himself well. No trace of effusion remained, no lateral movements of the joint, and the knee appeared the same as the other. After one year has lapsed no return of the trouble has occurred.

The following case occurred in my practice about eight years since:—

W. B., aged about five years, delicate, emaciated appearance, had been suffering for some time—about two months with symptoms of hip-joint disease. Dr. Fenwick saw the case with me. I obtained a very wide board, longer than the child, placed a soft mattress upon it, and pillows laid the child upon the abdomen and had him carried out daily in fine weather; the appetite was very poor but improved by the fresh air and tonics. As there was much pain, and as it seemed inevitable that the joint would open eventually I introduced a tenotomy knife behind the trochanter and along the neck of the femur into the distended synovial membrane. This was followed by some relief to the pain, and the contour of hip became enlarged by the fluid effused from the joint. I made a free incision into this, which discharged about a pint of sero-purulent fluid. The discharge continued for two or three months when the wound gradually healed. The joint was completely recovered in about a year and at this time it is impossible to detect any remnant of the disease.

The following is a case of Dr. Duckett's, which I saw with him in consultation, and which he kindly allowed me to report. The case was also seen by Dr. Reddy:—

J. McD., aged about 50, of a debilitated constitution, had suffered some time previously with some small boils on his body, which were absorbed. An abscess occurred in the axillæ. He had been ill about eight days at the time of the consultation of Dr. Duckett, Dr. Reddy and myself. There had been a sub-acute inflammation of the knee-joint and swelling of the



calf of the leg. The joint was now greatly distended with fluid, and an abscess of a large size had formed in the calf, which was opened and about half a pint of pus discharged. The knee was punctured with a trocar, and emptied of a sero-purulent matter, about half a pint also, and injected with a drachm of tr. iodine. In a few days the knee became again distended, and the next day the synovial membrane burst into the thigh, between the femur and the quadriceps extensor muscles, forming a large abscess. An incision was made above the knee, and it was found that the finger could be passed into the synovial sack. In three or four days typhoid symptoms set in; no lymph barrier appeared to form around the abscess; the tongue was very dry and dark, no appetite, patient very weak, and the wound emitted a fœtid smell. The wound was then enlarged to about four inches in length, the whole sack well washed out with warm water, and an ounce of tincture of iodine poured into it, and, while the edges of the wound were held firmly together, the thigh and knee were shaken so as to apply the iodine to the whole surface, which felt now quite dry, and had the appearance of moist chamois leather. This application caused a slight burning sensation for a few minutes, and no inflammatory excitement followed it. The patient commenced immediately to improve, and has continued steadily to do so up to this time, which is about five or six weeks. The discharge was healthy and the serum increased, until now there is little or no pus to be observed, passive motion was practiced when it appeared to cause no excitement, and to-day the joint is free from pain, can be roughly handled, and he is able to move and bear his weight upon it. There is some thickening of the tissues around the joint, but there is every reason to believe that the knee will, eventually, become useful and perfectly moveable. Three weeks later reports that he walks smartly by the aid of a cane; no pain and very little discharge from the opening.

In reflecting upon the history of the few cases that have come under my observation, I am led to the following conclusions:—

1st. That when a joint is laid open by accident the wound should *not be closed*, but left open, or if it is a puncture, enlarged in order to allow free external drainage and healing from the bottom. Unless, perhaps, in a clean cut, where

no inflammation follows the injury, and we might expect it to heal by first intention. If any excitement follows it should be opened at once. No stitching should be used.

2. That retention of effused fluids is the cause of cellulitis and acute abscess of joints, and that most of the danger resulting from open joints is due to closing the wound for fear of allowing air into the articulation, which I think is of no consequence.

3. That an accident producing an open joint is not as serious as one causing synovitis, followed by chronic effusion, since the effusion of serum, by distending the sack and relaxing the ligaments of the joint, renders it weak and liable to sub-acute attacks of synovitis, from slight causes, which is not observed after recovery from an open articulation.

4. That when effusion occurs in a joint, which is not absorbed within a reasonable period by the use of ordinary means, it is proper to discharge it early, before the tone of the tissues is lost, or to inject tr. of iodine, with or without withdrawal of the fluid.

5. That entire usefulness of a joint may be maintained in most cases where pus is contained, if proper treatment is adopted.

6. That where pus, or sero-pus, is contained in a joint, equal ulceration of the whole synovial surface takes place, until some weak point gives way. After which, the process of repair is set up, lymph is poured out, which, by uniting opposing surfaces, establishes a permanent ankylosis.

7. To prevent this result, and to maintain the integrity of the synovial surface, free and *early* incision is *demande*d, with or without the application of strong tincture of iodine to the whole synovial membrane.

8. That the application of pure tincture of iodine to the cavity of a joint does not produce adhesive inflammation, nor does it cause pain or subsequent excitement of any moment.

I will also append an extract from a letter which I lately received from a veterinary surgeon of large experience, to whom I wrote some time ago to experiment on injection of tincture of iodine into joints by the hypodermic syringe, and also to make free openings where there was effusion. He writes: "I have opened several joints in the last two months, let out the effusion and injected tincture of iodine, with the best result, leaving the joints perfectly smooth. In

only one case was it followed by any inflammation to speak of, which soon subsided, and a permanent cure followed. I have not had a stiff joint yet from this treatment. I do not now hesitate to open a joint, and I have never seen pus formed from opening the joint or from injection of iodine. I have also used the same treatment for bursa, and synovial leakages from tendons with the same result."

531 Wellington Street, Oct. 1, 1876.

## Progress of Medical Science.

### THE ADDRESS IN OBSTETRIC MEDICINE. (\*)

By LOMBE ATTHILL, M.D.,

Master of the Rotunda Hospital, Dublin;  
President of the Section.

I think, gentlemen, I may safely assert that the proceedings of this section of the British Medical Association, which is devoted to the consideration of the subjects comprised in the term "Obstetric Medicine," attract, on the whole, more general attention from the great body of our profession, than do those of any other section. The reason for this is sufficiently obvious, for while the busy practitioner may be wholly unable to devote time or attention to the study of the important subjects included under such heads as those of "Physiology" and "State Medicine," or find that in practice cases of operative surgery are comparatively rare, he is certain to discover that the conditions and affections brought under discussion here, are of daily occurrence amongst his patients; hence he seeks to improve his acquaintance with the nature of the conditions, and to learn the best means of successfully treating those affections, which are peculiar to women; more so, as the study of these diseases has probably been neglected, possibly entirely overlooked by him, during his student's career.

Another reason for the interest evinced in the proceedings of this section is this, that marked and rapid progress has of late years been, and still is being, made in the department of obstetric medicine. The very name of the section proves this. A few years ago the term "obstetric medicine," if used at all, would hardly have been understood. This section of the British Medical Association was until very recently termed that of "midwifery." Consider for a moment what this change of nomenclature implies—it implies this, that the study of the process and phenomena of parturition, important though they be, is by no means all that is now

required of the obstetric practitioner; that is, not of those alone who make obstetrics their special study; but of all, and their name is legion, who are called upon to treat the diseases of women.

This section then includes subjects of a most varied and extended nature; it includes midwifery proper, the diseases of the puerperal state, and those incidental to pregnancy, the considerations of disease of the vagina, bladder, and uterus, of the breasts, and last and not surely least, of the ovaries. Diseases of these latter organs are doubtless, in one of their aspects, within the domain of surgery proper; but that condition which demands the performance of the capital operation of ovariectomy, is by no means the most common of those requiring treatment, and, moreover, not a few able and successful ovariectomists are to be found amongst the ranks of obstetric surgeons. Some such I have the pleasure of seeing around me here to-day.

Gentlemen, we deem the practice of midwifery to be in no way derogatory. It is our honorable function to succor woman in her hour of trial, to shorten or relieve her sufferings, often to save her life or that of her offspring; to meet with promptness and decision the numerous dangers and difficulties which frequently and unexpectedly occur during labor, and which tax to the utmost our courage and endurance and skill; but these duties, though most important, form but a small portion of those which now devolve on us daily. The affections I have already indicated as coming within the province of obstetric medicine are so numerous and of such constant occurrence, that the right treatment of them is all important, as well for the sake of the sufferers as for the reputation of the practitioner.

The truth of this is now on all sides admitted, and the study of uterine disease, in its protean forms, is consequently steadily becoming more general; but unfortunately our knowledge of the pathology of these important affections is as yet imperfect, and our treatment consequently in many respects empirical and unsatisfactory. Still, great strides in advance are steadily being made, and we may look forward hopefully to a time not far distant when phenomena and symptoms at present overlooked or misinterpreted will be explained, and our treatment consequently become more scientific and efficient.

To the late Sir James Simpson, without doubt, is due the credit of inaugurating an era which has been marked by great and rapid progress in the department of obstetric medicine. His master-mind perceived how vast an amount of unrecognised disease, and what an extensive field for pathological investigation existed with reference to the reproductive organs of women; before his day little was

(\*) An Address delivered at the opening of the Section of Obstetric Medicine at the annual Meeting of the British Medical Association in Sheffield, August, 1876. By Lombe Atthill, M.D., Master of the Rotunda Hospital, Dublin; President of the Section.



known of uterine disease, and as to treatment, it consisted of little more than in exposing the cervix uteri, and applying to its vaginal surface, if it happened to be abraded, a solution of nitrate of silver, or of some other mild caustic. Of disease of the body of the uterus almost nothing, of its anterior absolutely nothing was known. A morbid, and as we now know, an unfounded dread existed of attempting to interfere with, or to investigate the condition of the cavity of the uterus. All this is now changed. We know that disease of the cervix uteri is of less frequent occurrence, and of less serious import than that of the body, and that its cavity may with impunity be trespassed on, and disease occurring within it successfully combated. Without doubt the most important practical result of the teachings of Sir James Simpson is this, that we do not now hesitate to dilate the uterus and investigate the condition of its interior, when symptoms indicative of serious mischief within the organ require us to do so.

I am well aware that by some practitioners the dilatation of the uterus is still looked on with dread, and that the attempt, if made at all, is undertaken with the greatest hesitation. I can only say that I believe these fears to be groundless, and that, if due care be taken to select suitable cases, and proper methods of carrying out the process be adopted, the treatment is a safe as well as a justifiable one. My own experience in the dilatation of the uterus has been great. I have practiced it very frequently indeed during the last ten years, and as yet in no single instance has a bad symptom followed, nor have I even once been compelled to abandon the attempt. But I am far from throwing doubt on the accuracy of the statements made by others, who have recorded the occurrence of alarming symptoms, or even of death, as consequent on the attempt to dilate the cervix uteri; and I am quite prepared for the possible occurrence of such, for all are aware that cases must occur in which the most trifling exciting cause will be followed by serious symptoms, though no grounds existed beforehand for anticipating the occurrence of such. But these are exceptional, and I believe, as a rule, that when serious symptoms arise, either during the process or in consequence of dilatation of the cervix uteri, they do so either because an unsuitable subject has been selected in whom to practice the treatment, or an unwise method adopted for carrying it out. On examining the records of the cases in which serious or unpleasant symptoms followed the attempt to dilate the uterus, I find they have generally occurred when practised,

1st. Either for the relief of dysmenorrhœa depending on the existence of a narrow cervical canal;

2nd. When the cervical canal is encroached

on by a fibroid of large size and unyielding structure;

3rd. When the process has been attempted to be carried out rapidly by means of metallic dilators; or,

4th. When it has been protracted over several days.

I have, therefore, in order to guard as far as possible against the serious results recorded by others as following attempts to dilate the uterus, laid down for myself the following rules, which I can recommend with confidence to others.

1. Never to dilate the cervix uteri for the cure of dysmenorrhœa or sterility depending on a narrow cervical canal or conical cervix.

2. Never to dilate in cases in which a large and dense intramural fibroid presses on and partially obliterates the cervical canal.

3. Never to use metallic dilators of any kind, but to choose for the purpose either sponge, or sea-tangle tents, which expand slowly and gradually.

4. Never to continue the process of dilatation for more than forty-eight hours. I prefer, in the few cases I have met with in which, after the lapse of that time, the cervix was not sufficiently open to suit the purposes I had in view, to postpone all operative interference for some weeks, rather than risk the result by prolonging the dilating process.

With respect to the first of these rules, I look upon the treatment of what is termed "mechanical dysmenorrhœa" by dilatation as being altogether a mistake. I doubt if any permanent benefit has ever resulted from it; while in several cases grave symptoms, and in one death, has to my knowledge followed the attempt. Equally, it is of importance not to prolong the dilating process. My own experience of the treatment of uterine disease requiring dilatation leads me to this conclusion, that unpleasant symptoms are likely to occur in a direct ratio to the length of time over which the process of dilatation extends. Again, I have known death to follow the attempt to dilate the uterus in a case where a large fibroid of dense structure, giving rise to menorrhagia and causing intense pain, was developed in the uterus, and encroached on the cervical canal. In such cases, dilatation is doubly objectionable, because the process is useless as well as dangerous; useless, because you will generally find that any attempt at operative interference from the interior of the uterus will be impossible; and dangerous, because inflammation is liable to follow, and that too in patients in the worse possible condition for resisting the attack.

Hardly second in importance to the knowledge that the uterus may be with safety dilated to an extent sufficient to enable us to remove large tumours, is the fact of which we are now certain, that remedies of even a powerful nature may, not alone with impunity, but

with the greatest advantage, be applied to its interior. But at this point our knowledge becomes defective. Some practitioners prefer one, some another agent, for intra-uterine application. It may be carbolic, chromic or nitric acid, or iodine, or the solid nitrate of silver; but as yet there has not been, it seems to me, sufficient care exercised in watching the action of these various agents, or in recording the effects they severally produce. Hence we are without data on which to base our treatment, or to guide us as to the agent to be selected in the treatment of the various forms of disease requiring intra-uterine medication. It is evident that no one of them can be suitable to all cases. For myself, I prefer carbolic acid in mild, and nitric acid in severe ones; but I freely admit I have much to learn on this point, and I look to others to aid me with their experience in deciding this important question. But it seems to me that, as with the dilatation of the uterus, so it is with respect to the application of agents to the interior of the uterus: that a groundless dread prevails as to their use. Here, too, as in the former case, the treatment is safe if carefully conducted, and if only practised in suitable cases and at the right time. Thus, if a caustic be applied through a narrow cervical canal, trouble is likely to occur. Equally will it probably follow if the fundus be tender to the touch, and chronic inflammation present; but, if the tenderness be first mitigated, and the inflammation lessened or removed, the application will, in all probability, prove beneficial.

In the treatment of uterine fibroids, too, we have made progress, but not as yet to a satisfactory extent. This much we know for certain, that many such cases, if menorrhagia be not excessive or pain intense, are best left alone; and it is astonishing in how many instances, even where menstruation is profuse, this course proves to be a wise one, treatment being restricted merely to what is absolutely necessary to prevent the flow being excessive. But, unfortunately, exceptions are of but too frequent occurrence; and how are we to treat these? The removal of large fibroids by abdominal section has been successfully practised, but the risk of life involved in the operation is great; and the attempt to remove smaller ones by means of the *écraseur*, after dilatation of the cervix is, I can vouch from personal experience, a difficult and eminently hazardous process. Again, enucleation is tedious, unsatisfactory, and often dangerous.

We have, however, at our command a resource which, if not all that we desire, is still generally efficient in controlling hæmorrhage, often sufficient to arrest the growth of the tumour, and sometimes apparently capable of reducing its size. I allude to the hypodermic injection of ergot, which, if it has failed in this

country to produce the almost marvellous results ascribed to it by Hildebrand, is, if properly carried out, a safe as well as an efficient remedy. In my first cases, the results obtained were not only uncertain, but unsatisfactory, for troublesome sores sooner or later formed at the seat of the injection. Of late, however, I have obtained much better results. In not one of ten cases recently under my care, in which I fairly tested this treatment, has the hypodermic injection of ergot been followed by the formation of an abscess or sore; in all it had more or less effect in restraining hæmorrhage; in one, the injection was repeated almost daily for five months, with the effect of absolutely restraining excessive menstruation, but with no other beneficial result, for the bulk of the tumour remained unaltered, and the pain was as intense as ever. Still it was no small matter to have transformed a profuse and exhausting flow, which formerly lasted for twelve or fourteen days, into one of moderate character and of but two or three days' duration. It is evident, then, that in ergot, employed hypodermically, we have a powerful agent, one capable of exerting a marked influence on uterine fibroids, but still uncertain in its action, and not altogether to be relied on.

Again, with reference to displacements and flexions of the uterus, much still remains unknown, and authorities seem to be as far as ever from agreement as to the important question of cause and effect. It is much to be desired, that the pathology of these conditions should be carefully investigated, and the obscurity which surrounds some of them at least, if possible, cleared up. In fact, to whatever subject we turn, we see that, great as are the grounds for satisfaction at the advancement made in the knowledge of uterine disease, much remains to be done, and much careful observation is still needed, if this department is to hold its position as one eminently progressive. The great obstacle which retards the investigation and consequent elucidation of many points of interest and importance connected with the study of obstetric medicine is doubtless this, that comparatively few patients afflicted with chronic uterine disease die actually of these affections. They may be doomed to a life of constant suffering, and existence itself may become an actual burthen; but most probably they will be carried off by some intercurrent disease; and, if a *post-mortem* examination be made at all, the investigation will be directed to other organs than those of the reproductive system. It would be of the greatest advantage to us, if those gentlemen who have the good fortune of being attached to large general hospitals in the capacity of obstetric physicians would direct their clinical clerks to attend all *post-mortem* examinations made in the hospital on the bodies of females, and record

the condition of the uterus and its appendages, and especially of the ovaries; for though doubtless, in the absence of clinical records of the history of the patient with reference to her uterine functions, much of value will be lost, still from time to time facts of great importance will be ascertained, and valuable information gained.

Information is specially needed with respect to some forms of ovarian disease. Some patients suffer for years from pain and tenderness of the ovary, from mammary pain and nausea of a most distressing character. Such I have seen reduced to a condition of actual despair; for all treatment seems useless, so utterly inefficient does it prove. In these cases, the ovaries are in general plainly enlarged, but the exact pathological condition of them is in many cases unknown. Here is an affection most deserving of investigation, both as to its causation, pathology and treatment. I know of no form of disease which produces more real suffering, equally of mind and body. An American surgeon, Dr. Battey, of Georgia, convinced of the inadequate results produced by ordinary treatment, has recommended the extirpation of the ovaries in such cases, arguing that, from the results on animals, the operation would be safe as well as justifiable in the human female. I confess that to my mind his views contain much of truth, and that, were I satisfied that I did not endanger life, I would in some cases sanction the operation; and I think we may possibly yet see it practised even amongst ourselves, as I believe it has been in America. But such a practice would, after all, be a lamentable confession of the inadequacy of medicine to cope with what should be a curable disease. Let us hope that, as light is let in on these obscure questions, this reproach will be removed.

Gentlemen, I have I fear exceeded the limits of the time allotted to each paper, and it would ill become one who has to enforce a rule, to break it himself; but I cannot conclude without some allusion to what has been termed "the burning question" of the day. I have no intention here of discussing the advisability or otherwise of the admission of women into the profession of medicine; but I must refer to the course proposed to be adopted by the College of Surgeons of England, which on granting their midwifery diploma to persons but partially and most imperfectly educated; a step than which I cannot conceive one more retrograde, or so calculated to lower the profession in public estimation, or to inflict injury on the poorer classes among whom such persons would necessarily practise. I am happy to say that the example set by the College of Surgeons in England has not been imitated by any other licensing body, though more than one had the power of doing so; and to the credit of the

University of Dublin, be it said, that it has recently been decided to grant a special degree in midwifery to persons who have previously obtained one in medicine or in surgery, being thus the first British University which has recognised the position gained by obstetric medicine, an example which I trust will yet be imitated by the sister universities.

#### THE ANTISEPTIC METHOD OF DRESSING OPEN WOUNDS.

*A Clinical Lecture By PROF. JOSEPH LISTER, of Edinburgh. Delivered at Charity Hospital, New York, October 10 1876.*

(Phonographically reported for THE MEDICAL RECORD by Nelson W. Cady.)

GENTLEMEN:—It is a most unexpected privilege that I enjoy of addressing a few words to you. Until just now, when I saw you all galloping with such speed from the steamer, I had no idea that I was to address so large a body of students.

You will, therefore, excuse me if the remarks which I may make should be extremely imperfect. If, however, as I understand my friend, Prof. Van Buren, you are already, through him, indoctrinated in the principles of antiseptic surgery, it is not, therefore, necessary for me to go much into details.

Well, then, as the patient is not quite ready, I will say a few words of introduction. The main principle of antiseptic surgery is to be illustrated in this case by opening a venereal abscess in the groin.

If we have a fracture, the skin being unbroken, everybody knows that such an injury is devoid of danger. We put on proper splints, keep the parts dressed, and there is no inflammation in the parts to speak of,—no constitutional disturbance and no trouble. But if it so happens that the skin is broken at the same time that the bone is broken, then we have an injury that used to be one of the most formidable in surgery. If we compare the two injuries we see that the circumstance of this skin being broken is not, *per se*, of any material consequence at all; it may be that the simple fracture is much the more severe injury of the two. The bone may be comminuted, the vessels extensively lacerated, and a large amount of blood diffused. Whereas, in a compound fracture, we may have the bone simply snapped across, but the skin broken.

Now we know from other circumstances that the lesion in the skin does not in itself particularly constitute the injury; it is not the injury to the skin, *per se*, but the fact of the skin being broken. We all know that if a compound fracture is treated or not treated in the course of three or four days we have an offensive discharge from the opening. I do not mean that a compound fracture not treated antiseptically will have such a result. It was known in the time of John Hunter that such a fracture, if covered over with cotton and air-tight dressings and left alone, will go on as quietly as if the skin were unbroken. But, suppose the skin is treated with poultices you are sure to have a suppuration in two or three days. The blood within, the extravasated

blood, putrefies. If any one were to talk of pouring a quantity of putrid blood into a recent wound, such a proposition would be received with horror; but everybody knows that pretty much the same thing takes place if the blood is allowed to putrefy in a wound. After a few days have elapsed, the wound becomes granulated, and as soon as granulation takes place, if the surfaces are brought together, there is apt to occur union by first intention.

It was shown by Pasteur, conclusively shown, it seemed to me, after reading his experiments, that putrefaction was a fermentation, that it was a manifestation of the existence of a ferment similar to that which exists in yeast.

When that was shown by Pasteur, then at once it occurred to me, here is a chance for improvement. We may possibly be able to prevent putrefaction in wounds if the cause of putrefaction in wounds is not the access of air, but of living organisms developed in the air, and which in the blood are the cause of putrefaction; then it may be that we may get hold of some agent which will be strong enough in its action upon this kind of organisms to destroy them without doing damage to the human tissues, just in the same way as crab-lice are destroyed without injury to the skin. So in this case, if we can apply to our wounds some agent which may destroy the minute organisms, which are the cause of putrefaction without injuring the wound, the problem is solved—it is no longer a question of hermetically sealing out the air; it is merely applying a dressing that shall act as a germ-destroyer to prevent the influence of these living organisms.

This, gentlemen, is our principle. The agent which we found in the majority of cases most efficient is carbolic acid. It had been used without my knowing it, in a medical ward in the hospital, and with great advantage, as an antiseptic. It had been used, as well as antiseptics of various kinds, for the purpose of *mitigating* putrefaction, not of *preventing* it: that is the great difference.

The principle of antiseptic treatment is to prevent the occurrence of putrefaction in the wound by the presence of the organism with which you have to deal. If you can prevent that, then your wound comes to be in the condition of a simple fracture.

Taking this example of a simple fracture, we feel, as a matter of course, that if we really can by any means adopt such a mode of dressing as shall be equally efficient with the unbroken skin a wound, no matter how severe or contused it may be, and no matter what the patient's constitution, ought to be perfectly amenable to treatment.

You may ask, Why do you disregard the patient's constitution? My reply is, Do you regard the constitutional treatment important in a simple fracture in which we have a severe wound, contused, lacerated, and so on? If you could see such a case, you would say. Here is a wound that will not heal without sloughs and suppuration. Yet because we cannot see the injury, and because the skin is unbroken, we are apt to forget what is really the nature of the injury in a simple fracture, which I venture to say is

as bad and much more severe than any that the surgeon ever inflicts. Yet no man regards the patient's condition in a simple case of fracture, but contents himself with the local treatment. If constitutional treatment is adopted at all, it is only in case of constitutional disturbance.

The treatment of an ordinary abscess, acute or chronic, under antiseptic management is, I think, one of the most beautiful points of the whole matter.

Suppose an abscess is opened in the ordinary way, that is, by a free incision. The result is, you get rid of your patient by opening his abscess; the previously maintained suppuration is gotten rid of by relieving the tension; but, instead of the previously existing causes of irritation, you let in a new one, viz., *putrefactive element*. The discharge remaining in the abscess putrefies, and, by reason of its irritating properties, ends in and keeps up the suppuration. But by this means (the antiseptic method) you prevent putrefaction, prevent the access of putrefactive elements, while at the same time you get rid of the tension by opening the abscess and introducing a drainage tube, while the so called *pyogenic membrane* is left free of any disturbing cause at all, and as soon as the pyogenic membrane is free from disturbance it ceases to be pyogenic.

If you take the two flaps of a patient's thigh where an operation has been performed by the double flap method, and lay the granulating surfaces together—taking away the dressings which our forefathers used to have between the flaps after an amputation to make them lie apart—when you come to see the case next day you will probably find a large extent of these granulating surfaces coalesced near to each other. Well, now, consider these surfaces one moment.

*The granulating surfaces have no tendency to form pus unless they are irritated.* Suppose that the granulating surfaces have a tendency to form pus, then if the two granulating surfaces are brought together we should have pus secreted. *Impossible.*

The secretion would still go on, although the surfaces were thus united and in contact with each other. There is nothing to prevent the possibility of the effusion of fluid, if it were the office of granulating surfaces to produce pus. The pressure would lead to tension and the formation of more pus. But even then there is no more serous effusion, that is to say, the serous effusion soon ceases after the granulations are brought together; for if the serous effusion still continued, the granulations could not coalesce. What is the fact that leads to this remarkable result, that from that time forth the formation of pus ceases? It is simply disturbance that keeps it up, and nothing else; but when the granulations are put in contact with each other, they will protect each other perfectly from any irritating cause. The granulations of the previously suppurating wound thus protected, immediately cease to suppurate; very soon after they cease to form serous effusion, the tissues proceed to develop into the higher fibrous tissue of the cicatrix. There, gentlemen, you have evidence that the only thing granulations require is to be *left alone*, free

from any serious disturbance, and the result will be that you will have no more pus. Open the abscess antiseptically; employ efficient antiseptic dressing, and at the same time provide for the escape of serous effusion, and the suppuration ceases from that time forward.

#### THE OPERATION.

The apparatus by which the carbolic spray is generated has been already described, so that it is not worth while to go into details. The few general principles which Prof. Lister laid down were of much importance, viz., that it was necessary, to the proper application of the antiseptic method, that the spray should be thrown out in large volume, extensive enough to envelop completely the hands of the operator, the instruments, and the site of the operation; and if at any time he was compelled to move his hand out of the spray to take up a new instrument, he should dip his hands in the basin of carbolized water (aq. 20, acid carbol. 1) before using it, otherwise that neglect might be the means of introducing these minute organisms into the wound; that the skin over the point of operation should be very carefully shaved, so as to leave no parts unexposed to the action of the carbolized water which was to be applied to the integument for the destruction of any of these organisms which might exist upon it; that any neglect of the total destruction of all the organisms would be fatal to a properly considered antiseptic method of treatment.

The abscess in the patient's groin being opened in the usual manner at the most dependant point by a free incision, the Professor remarked that, as it was necessary to establish a drain, he was in the habit of using the india-rubber drainage tube of Chassaignac; that an important point in the application of this tube is that it should not be left projecting outside the wound, but should be flush with the surface; and that to keep the tube from being pushed into the wound, two small threads were fastened on either side of it; and that, as in the present instance the tube was placed in an oblique position, it was necessary to cut the end of the tube in an oblique manner so as to be made flush with the surface.

The abscess, when opened, discharged a large amount of grumous, offensive pus, which was carefully sponged away with carbolized water. Happening to pick up a sponge that had been dipped into the basin containing the chocolate-colored mixture of pus and carbolized water he used it also, and remarked—in answer to some one who objected, that the sponge was foul with pus—that this was perfectly true, but that the sponge was *antiseptically clean*, and was, moreover, vastly cleaner for surgical purposes than the majority of sponges obtainable in the shops, because it had been dipped in the antiseptic fluid. Having emptied the abscess and put in the drainage tube, he applied the antiseptic dressing which consisted, first, of several layers of carbolized gauze, to act as a compress; then of a large layer, about sixteen inches square; next a piece of oiled silk, and finally of several more layers of gauze, the whole

being confined to the limb with elastic bands, so as to keep out the air.

One of the windows of the amphitheatre happened to be open, and a current of air deflected the cloud of spray from the wound. Professor Lister at once called attention to this as an important point to be observed. The window must be shut, otherwise the spray would be diverted from the wound, allowing the access of the organisms against which the spray was intended to provide.

His minute attention to all such details made this lecture of unusual interest and importance.

#### GOURAUD ON THE ACTION OF CLIMATES ON THE TREATMENT OF PULMONARY PHTHISIS.

In a second note on the action of different climates on the treatment of pulmonary phthisis (*L'Union Médicale*) Dr. H. Gouraud says:

If we merely desired to discover the places on the face of the earth where phthisis is absent or rare, the task would be comparatively simple. They are to be found from the stations of Southern France and of Italy, even to Norway, the Faroe Islands, and Iceland; from mild humid insular stations to the steppes of the Kirgoi with their eminently dry climate.

Norway, Iceland, and the Faroe Islands have cold humid climates, and yet appear to enjoy an immunity from phthisis. On the other hand the cold and dry steppes are now much employed in combination with the use of koumiss. Patients are sent in forty hours by rail from St. Petersburg to Nijni-Novgorod, and from that place to Samara in the steppes, in twenty hours by steamer. There they stay from May 1 to October 1.

What greater contrast can there be than that between the steppes of Russia, the south of France, and the climate of Madeira? Yet all are sought for the same object. Granting that many of these places enjoy a considerable degree of immunity from phthisis, why does this immunity not extend to visitors? The answer is, because phthisis is not a product simply of climate. It is also a social disease. If there can be any fact certain, it is this, that the more people become crowded together the more industries are developed, the more does phthisis show itself. Crowding in small rooms at home, too early labor, the inhaling of foul or of deleterious particles in manufactories, a too sedentary life, are frequent causes of phthisis. The great centres of industry are the places which yield the highest mortality from it, as London, Manchester, Liverpool, Paris, Glasgow, New York, Philadelphia, New Orleans, Berlin, Munich, and Vienna. England has been called the home of industry and of phthisis.

We need not inquire here into the accidental and constitutional cause of phthisis; but we may say that, as climate is not the sole cause of phthisis, so climate alone will not produce immunity from it. Phthisis is produced in a great variety of climates, and, consequently, it is not to be always avoided by the mere selection of a climate.



In medicine climate is an adjuvant, not a specific. The absence of a particular malady from a place does not prove that the place is a prophylactic against that malady. A climate may have tonic and exciting properties which favor the nutrition and the good health of persons born in that climate, and employing a diet and mode of life suitable to it. Yet these same tonic and exciting qualities may not suit subjects already attacked by such and such maladies, and having irritable or vulnerable organs. These qualities favorable to the one class may be unfavorable to the other. The immunity of the natives of a place from any particular disease only furnishes a reason for studying it in its climatic relations.

Immunity of itself affords no guarantee for patients; but if it is proved that there are fewer sick of a given malady, say at a certain elevation, this fact is so far favorable to altitude. If, further, it is verified by direct observation that patients in such or such stages of their complaints derive benefit from residing in the mountains, this is enough to recommend mountains, especially if they have already tried other climates without advantage.

It seems now to be generally admitted that the number of cases of phthisis diminishes as the elevation increases. How is this to be explained? We must in the first place allow that many of the factors of phthisis are absent at a certain elevation, that is, all of them that are connected with social life and aggregation; but besides this, what further explanation have we?

1. Hirsch says that it is because the alternations of temperature are less marked in the mountains than in the plains.

2. Brehmer says that the air is more tonic and favorable to nutrition.

3. Jourdanet says that the cause is the deficient supply of oxygen.

It is true that the relative proportions of oxygen (21), and of nitrogen (79), are the same in the mountains and in the plains, but, as the higher layers of the air have less density, the quantity of oxygen in them for each inspiration is less. Experiments have shown that the quantity of oxygen in a liter of air at the height of 15,000 feet is about one-half what it is in the plains. The result of this is that, in order to get the necessary supply of oxygen, the inspirations become deeper and more complete, and that the thoracic cavity increases in capacity. The pulmonary cells, dilated and enlarged, become to a certain degree emphysematous, and in the end produce the dyspnoea called *asthma montanum*.

Two pathological facts appear in the mountains, which stand in relation to each other, the rarity of pulmonary phthisis and the frequency of emphysema. It seems also probable that the increased expansion of the pulmonary cells leads to a certain degree of anæmia of the lungs, and this anæmia, like emphysema, is considered to be antagonistic to tuberculosis.

The diminution of atmospheric pressure causes a derivation from the centre to the circumference, and produces a real revulsion towards the cutaneous

surface. Add to this the tonic action of the air and its influence in promoting appetite and digestion, and we see some explanation of the rarity of phthisis in mountain climates.

To these causes Lombard adds a certain excess of carbon in the system, consequent on the diminished supply of oxygen, and he thinks that this has something in common with the state induced in Icelanders (who enjoy immunity for phthisis) by the free use of oils and animal fats or butter.

To these influences Lombard adds the effects of hydro-therapeutic treatment and of muscular exercise at the mountain sanatoria, along with the use of wine and fruit and nutritious diet.

Besides other objections that may be raised to Lombard's views, it is difficult to suppose that this real or supposed anæmia is a prophylactic of phthisis in the mountains, when we so often in the plains see anæmia to be a prelude of tuberculosis.

In the place of Dr. Lombard's anæmia, Dr. Gouraud would prefer to assign more satisfactory reasons for the beneficial effects of mountain climates in phthisis.

The purity of the air of mountains consists practically in the absence of all organic particles; and when we consider the effect of vitiated air in crowded workshops in producing phthisis, we can understand the prophylactic effect of mountain air. The transparency of the air which is dependent on its greater dryness, and the more powerful action of light, depending upon the same cause, aid materially the operation of the purity of the air. The effect of residence in the mountains on the dimensions of the chest is also worthy of careful consideration, and has been studied by M. Armieux, at Barèges, at a height of more than 3000 feet. He ascertained that in the case of ninety-six soldiers who were sent up to Barèges there was, after four months residence there, a distinct increase in the measurement of the chest. If this result be fully established, it is evident that it will have a very important bearing on cases of threatened phthisis in the young, and that a mountain climate is to be considered as favorable to the development of the thoracic cavity, and, consequently, as improving the respiration.

We thus understand how mountain air may be useful in certain cases and in certain periods of phthisis. It acts by its purity, by its dryness and transparency, as well as by the diminution of atmospheric pressure. Dr. Gouraud observes that these principles have only, or nearly only, been applied in Switzerland, and thinks that mountain stations for such cases might very well be selected in some parts of France.

He concludes by observing that after all neither barometer nor thermometer, neither hygrometer nor anemometer, can determine what is the suitable climate for such and such phthisical patient. All depends on the nature of his constitution, and on the way in which the various meteorological conditions affect him.—J. M. Epherson, M.D., in the *London Medical Record*.



## HOSPITAL REPORTS.—UNIVERSITY OF PENNSYLVANIA.

Service of Prof. Louis A. Duhring. Reported by ARTHUR VAN HARLINGEN, M.D.

## ECZEMA RUBRUM OF THE LEG.

The patient, who is suffering from eczema rubrum of the leg, has been before the class on a previous occasion, and, therefore, Dr. Duhring said he would not discuss the history of the case, but would make some remarks upon the treatment of eczema in general, and particularly of eczema rubrum. It would be, of course, impossible to go into all the details, but a general idea may be given of the methods to be recommended in the different forms of the disease. In the first place, regard must be paid to the circumstances of the patient. A plan of treatment which could be carried out in private or hospital practice, where every appliance is at hand, would not be practical among dispensary patients; we must always take this into consideration.

Eczema rubrum is a very common affection; we meet it every day, and it is frequently of long standing. This patient has been under all kinds of treatment, she says—internal and external, arsenic, iron, iodide of potassium, tar and other ointments, etc., etc.,—until the entire round has been gone through. Under these circumstances it would seem at first sight difficult to suggest anything which had not already been tried and had failed. But remedies which may not succeed when used at the wrong time, and in an improper or careless way, may succeed when appropriately and intelligently employed. A careful examination of each case in all its aspects, should invariably precede the institution of any plan of treatment. The patient's general health should be inquired into, the locality of the disease noted, and the character of the skin affection examined. The fact of the acuteness or chronicity of the disease will decide whether one or another set of remedies will be appropriate.

The condition of the alimentary canal should be particularly inquired into, and, if at all abnormal, should be regulated by aperients—not purgatives. Among these, the natural mineral waters of Saratoga, and the German waters now so extensively used, are useful. In dispensary practice, a preparation containing the sulphate of magnesium may be employed. A tonic combined with an aperient, such as is frequently prescribed in our hospital under the name of *mistura ferri acidi*, will be found of service. Its action, in the ordinary dose, is gentle, and can easily be regulated to suit the case. This mixture is adapted to a large number of cases and may be used for a considerable period, its action tending to improve the tone of the alimentary canal; it not merely opens

the bowels from day to day, but in fact tends to regulate them. Subsequently arsenic may be used, but in small doses, as a tonic. If used in large doses, with a view to some supposed specific action, it is apt to disorder the stomach and to do more harm than good. What is meant by a small dose is one or two minims of Fowler's solution three times a day. The treatment of eczema rubrum, in fine, should be general.

In many cases local treatment alone is all-sufficient. In the earlier stages of the disease, when there is considerable watery exudation, the following formula is serviceable:—

R. Hydrarg. chlor. mitis, ʒ ss  
Unguent. zinci oxidi, ʒ j. M.

Or the following:—

R. Bismuthi sub-nit., ʒ ss  
Unguent. zinci oxidi, ʒ j. M.

When the itching is severe, the following may be employed, whether the eruption be moist or dry:—

R. Acid. carbol., ℥ x  
Unguent. zinci oxidi, ʒ j. M.

This will usually relieve the pruritus. Another ointment which generally acts very well:—

R. Pulv. camphoræ, ad. ʒ j.  
Unguent. zinci oxidi, ʒ j. M.

Half a drachm to a drachm of glycerine added to this will often prove advantageous.

All these may be called soothing applications, and are to be employed during the acute stages of the affection. They should be applied morning and evening, the excess of the former application being gently removed with a soft cloth previous to applying a fresh quantity. The accumulating scales should be removed from time to time, but the affected limb should not be washed often. It is not necessary, in the case of a limb like the one before us, to use very much ointment; a piece the size of a chesnut, rubbed well in for ten or fifteen minutes, is sufficient. The bandage is an important aid to treatment. When the leg is the part affected, the bandage should be closely, but not tightly, applied, beginning at the toes and covering the entire leg to the knee, and should be changed twice a day.

Another plan of treatment to be mentioned is that by means of *sapo viridis* and *unguentum diachyli*. This is, perhaps, the best method in most cases, provided the patient can be kept under control, and the treatment properly carried out.

"*Sapo viridis*," or green soap, is a greenish or brownish viscid soap, made chiefly in Germany, of potassa and various fats. It is also manufactured in this country, and has the advantage over the ordinary "soft" soap in general household use that its composition is

more uniform. It contains twenty to thirty grains excess of potassa to the ounce.

Unguentum diachyli is not contained in the United States Pharmacopœia, nor in the dispensatory; it is now, however, made pretty extensively, and is one of the formulæ contained in the University Pharmacopœia. It is made thus:—

|                  |         |
|------------------|---------|
| R. Plumbi oxidi, | 3 iss   |
| Olei olivæ,      | 3 viss. |

The oil should be first mixed with water and heated; then, while fresh water is poured in and the mixture stirred, the litharge is gradually added.

The method of employing the *sapo viridis* and *unguentum diachyli* is as follows: A small piece of the soap, the size of a nut, is rubbed into the skin over the affected part, a little water being added from time to time, for ten to fifteen minutes. The effect produced by rubbing with the *sapo viridis* is the breaking down of any vesicles that may be present, and clearing away of the débris of epithelium, crusts, etc. The surface of the diseased skin under this procedure pours out an abundant fluid, and little bleeding points may be seen here and there. The skin is now washed thoroughly clean with warm water, and carefully dried with a soft towel; it is then ready for the ointment. This has been already prepared for use by spreading it thickly upon strips of soft linen two or three inches wide; these are now applied to the diseased surface and secured in position by a bandage. The pain caused by rubbing in the soap becomes quickly allayed, and relief follows. This application of *sapo viridis* and *unguentum diachyli* should occupy, if properly carried out, nearly an hour in its performance, and should be repeated morning and evening. It is useless to attempt this method of treatment unless it can be carefully carried out, and it is only applicable in cases where the disease is strictly local.

After two or three weeks of treatment, improvement, as a rule, ceases, and a change must be made. The following ointment is usually useful at this stage:—

|                   |        |
|-------------------|--------|
| R. Picis liquidæ, | 3j     |
| Cerat. simplicis, | 3j. M. |

or some other ointment, as the dilute nitrate of mercury, or red oxide of mercury ointment, may be employed. With one of these the cure of the patient can generally be completed.

Different patients will be found to vary as regards toleration of ointments. One will improve under an ointment containing four drachms of tar to the ounce, while for another half a drachm to the ounce is as strong as can be borne.

In regard to lotions, little has been said.

These are not often used in eczema of the leg unless the disease be very acute.

It is worth careful study to be able to cure a case of chronic eczema rubrum of the leg. The disease is one difficult to treat unless thoroughly understood.—*Philadelphia Med. and Sur. Reporter*.

#### THE MANAGEMENT OF DIPHTHERITIC PARALYSIS.

The eminent Sir John Rose Cormack says on this subject, in the *Edinburgh Medical Journal*:—

Iron is particularly indicated in diphtheritic paralysis, as the patients are always anæmic. There are few cases in which its administration does not prove itself in an obvious manner to be useful in a high degree. Sometimes it is only borne in very small doses.

*Nux vomica*, either in the form of extract or the liquor strychniæ of the British Pharmacopœia, taken daily, with some ordinary combination of laxatives, such as the compound rhubarb pill of the British Pharmacopœia, ought to constitute a part of the treatment in nearly every case. It increases the peristaltic action of the intestine, imparts expulsive and retentive power to the bladder, and likewise has a general influence in improving innervation. The dose ought to be moderate, for large doses prove too exciting to the nervous system, and so tend to exhaust rather than invigorate its flagging powers. From half a grain to two grains of the extract once a day, with or without the occasional or constant addition of from five to ten drops of the liquor strychniæ two or three times a day, are suitable doses.

Local treatment is of the most importance, with a view to direct toward the wasted and wasting muscles a greater supply of blood, and thereby improve their nutrition. Occasional blisters act very beneficially in this way; but they must not be relied on to the exclusion of the constant use of stimulating pastes or liniments. I do not know of any local stimulant more efficacious, or better adapted for continuous use, than a ginger and mustard paste. The object of using the paste is to maintain a warm glow in the skin without vesicating it. The potency of the paste must therefore be proportioned to the susceptibility of the skin. By applying too powerful a stimulant to an extensive cutaneous surface, we may be obliged to suspend the local treatment, and so impede the progress of the cure. In some excitable patients who cannot bear long-continued counter-irritation of the skin, a gentle kneading of the paralyzed muscles three or four times in the twenty-four hours will be found useful as a means of directing a supply of blood to them. In such cases, after each kneading, a moderately stimulating liniment containing a small quantity of laudanum may be applied with great benefit. The laudanum prevents an un-

easy bruised feeling, which is often complained of after the kneading, and in irritable subjects is apt to induce restlessness and insomnia.

Galvanic excitement of contraction in the paralyzed muscles is often decidedly useful; but it is a measure which requires to be employed with moderation and at intervals of about twenty-four hours. If resorted to too early, or too freely, it exhausts the nervous power of the affected muscles.

#### DOG'S MILK IN RICKETS.

The *Gazette Hebdomadaire* states that it is the custom among the women of Monttrun, in Dauphiné, to continue suckling for two years and a half to three years, with the idea of preventing another pregnancy; and if the infant dies, the mother either adopts another, or takes a puppy into her family to carry on the process. All these puppies suffer from rickets, which resembles exactly the rickets of children, except that the deformity is never afterward remedied. These observations, and the fact that the dogs always recovered under the influence of their own mothers' milk, induced M. Bernard to submit a rickety female child of twenty-six months to the dog's-milk cure. A powerful bitch was provided to act as wet-nurse for the child, and after from two or three months of this method of imbibing nourishment, the swelling of the epiphyses and the bending of the bones had notably diminished, the muscles were stronger, and at the end of the time the child could stand and take a few steps. The health of the patient was, at the end of one hundred days, extremely good; a slight curve of the femur and sternum being the only remains of the deformity, and the cure was permanent. He has adopted the treatment successfully in six other cases, and he expresses the belief that it will give encouraging results.

#### REMARKS ON APOPLEXY.

In a lecture on Cerebral Hemorrhage, in the *British Medical Journal*, Dr. Julius Althaus remarks:—

Among the various points which influence the issue of such attacks as just described, the *age* of the patient is a most important one. Clinical experience has shown that the young recover more easily from the complaint than the old; and the result of my researches on the mortality from this disease in England and Wales during the last forty years, enable us to give considerable precision to this point. A large number of infants die of apoplexy in the first year of age; but these are mostly cases of meningeal, and not of cerebral hemorrhage. Of the latter there are hardly any instances between the first and fifteenth year of life; after fifteen they are "few and far between"; but at thirty-five there

is a perceptible increase, and the numbers then gradually swell, until they reach an immense maximum, between seventy and seventy-five years of age. Between seventy-five and eighty the mortality from this complaint is still very large, while after eighty a rapid fall sets in; but, considering how few people are still alive at eighty and the subsequent periods of life, the fatality of cerebral hemorrhage does actually increase rather than diminish as age advances. I am, therefore, able to state in general terms that cerebral hemorrhage is of slight significance up to thirty years of age; that its fatality increases *pari passu* with years; and that *the greater the age the less is the probability of recovery from cerebral hemorrhage.*

While, therefore, age must, in every individual case of this kind which may come under your observation, largely influence your opinion about the patient's prospects, you should know that *sex* has no influence at all. It is true that it has hitherto been generally assumed that males are more liable to die of apoplexy than females; but my investigations of this point have conclusively shown that such is not the case; that the sexes die in almost equal proportions of the disease; and that the slight excess which is found to exist is for women and not for men, the proportion in two hundred thousand consecutive cases being 1000 for males to 1009 for females. From this you will perceive that for the purpose of prognosis *sex* is devoid of practical importance.

The *constitutional condition* of the patient has, on the contrary, a most important bearing on prognosis. Where cerebral hemorrhage occurs from leukaemia or contracted granular kidney, the prognosis is unfavorable. Gout and syphilis are likewise undesirable complications, while the absence of constitutional faults will, *cæteris paribus*, render the patient's prospects more hopeful.

Finally, *treatment* may incline the balance towards recovery or death. The treatment by venesection, which was formerly much in favor, was thoroughly irrational, and generally followed by disastrous results; indeed, many patients have died of the remedy rather than of the disease. Venesection has lately fallen into disuse; but the condition of the brain during cerebral hemorrhage is not one of congestion, as was formerly believed, but of anaemia; the organ not only loses blood largely, but is also, from compression of its arterioles through the clot, unable to receive a fresh supply of the reviving fluid; death in this disease takes place chiefly from anaemia; and, by resorting to phlebotomy, you simply increase cerebral anaemia still further, and thereby hasten the fatal result. *Eschew the lancet, therefore, as a deadly instrument in these cases.*

A simply expectant plan of treatment is recommended by the most recent writers on the

disease; and there can be no doubt that abstaining from all active interference is far better than to bleed your patient. Molière, on his death-bed cried out to his doctors: "Laissez-moi mourir, mais ne me tuez pas!" and the expectant plan of treatment certainly does not kill the patient, it only allows him to die. In spite, however, of recent authorities for doing nothing, a more active mode of treating cerebral hemorrhage seems to me to be called for.

Your object must be to arrest the further effusion of blood from the ruptured coats of the miliary aneurisms, by causing the vessels to contract. Now, many styptics must be inapplicable for these cases, because the patient cannot swallow, and even if medicines were introduced into his stomach, it seems most doubtful whether they would be absorbed. Nor can the rectum be used for the purpose of affecting the circulation, as there is frequently paralysis of the sphincter ani, and inability of the bowel to retain its contents. The hypodermic mode of administering medicines seems, therefore, to recommend itself, particularly in these cases; and the remedy I think most appropriate for them is ergotine.

There are two kinds of ergotine known to chemists, viz., Wigger's and Bonjean's. The former is insoluble in water, ether, and dilute acids, but soluble in alcohol, strong acetic acid, and caustic potash; and, on account of these peculiarities, it is not suitable for subcutaneous injection. Bonjean's ergotine, on the other hand, is easily soluble in water, and it is this therefore which you should use. I am in the habit of injecting a grain of it every hour, or where the symptoms are very urgent, even every half hour, into the subcutaneous cellular tissue; and, although the experience of a single observer, in a disease like the one now under consideration, cannot count for much, yet I feel justified in recommending you to follow this practice, as being likely to save many lives.

#### TREATMENT OF CROUP.

"I will mention those remedies which are most frequently used, and which generally prove successful, with a view to show the contrast of these two diseases throughout, rather than to hope to benefit you by any new suggestions. The first effect which we most desire is free emesis, which, if taken in time, gives instantaneous relief. Among the various remedies first and mildest is ipecacuanha, either alone in powder or syrup or combined with tartarized antimony. Mustard is very efficacious, the pulverized sinapis of the Pharmacopœia, in teaspoonful doses given in water. The various nauseating oils are resorted to often with good effect. Last, and perhaps best of all, is powdered alum and syrup, equal quantities of each, given for effect, it may be in teaspoonful

doses every five minutes, until free vomiting of the membrane is produced. When the emetics do not prove satisfactory, cathartics and absorbents are resorted to. Calomel and soda are very beneficial combined together in small doses and frequently repeated. Local applications in croup are very efficacious. Perhaps after the first emetic the child should be put in a warm bath of 96° containing salt and mustard, and, after remaining about ten minutes, taken out, wiped dry, and wrapped up in warm blankets. The counter-irritating action of mustard, if taken early in an attack, acts almost like a charm in its prophylactic effect. Spiritus terebinthinæ is also well worth resorting to, both as an irritant and resolvent, in the rapidity with which it is absorbed into the system. Blisters are not necessary nor considered efficacious, as being too slow in their effects. After all the prompt appliances have produced as much irritation as is tolerable, an after-application of an unctuous nature, such as lard and snuff combined, should be worn over the breast for some time, as the disease frequently manifests a disposition to return about the same time for three or more successive days. The patient must be carefully guarded against any change of temperature or vicissitude that might provoke a return of the disease. After the choking paroxysm of the disease has passed away, the patient should take an expectorant to allay the remaining irritation and cough. Perhaps as good a combination as might be suggested for this purpose would be a mixture containing equal parts of syrup of senega, squills, ipecacuanha, acacia, and paregoric. In a few days all the symptoms will disappear, and the patient will be well and hearty."—*Annales de Gynécologie*.

#### TREATMENT OF DIPHTHERIA.

"I will not stop to enumerate the long list of remedies used, but will confine myself to the method which I have adopted, and with such evident success that I feel glad to announce to any of you who have not followed the same line of treatment that you will be compelled to say 'Eureka.' I am sure I feel quite as enthusiastic in the success of the treatment which I propose to lay down as one of our number is in the treatment of variola with milk-punch and egg-nog. If you are permitted to see the patient within the first few hours of the attack, commence your treatment at once with quinine and aromatic sulphuric acid in doses suitable to the age of the person receiving it. Give freely of solution of chlorate of potassa, as a disinfectant, and perhaps you will not be required to administer any other remedies. If, however, the membrane has become so thickly deposited as not to be affected by the acid and chlorine, you should apply with your own hand a mop,

properly made, saturated with the liquid persulphate of iron, and literally swab out the throat until you remove every particle of membrane. Let this be repeated two or more times each day, or as often as the membrane would continue so to be reproduced, and you will have the satisfaction of seeing your patient make a speedy recovery without any of the consequent sequelæ. I took my first hint of the sulphuric-acid treatment from a short extract which I clipped from a paper coming from a doctor in Australia, where the disease was producing such extensive ravages that the government offered a large reward for any certain method of cure. I will quote from the paper: 'It is simply the use of sulphuric acid, of which four drops are diluted in three fourths of a tumbler of water to be administered to a grown person, and a smaller dose to children, at intervals not specified. The result is said to be a coagulation of the diphtheritic membrane, and its ready removing by coughing. It is asserted, where the case thus treated has not advanced to a nearly fatal termination, the patient recovered in almost every instance.' This suggested to me the treatment which I have already announced; and from the experience of entire success which I have had in the last two years in not having one fatal case during that time from that disease, where I had the treating of the case from the beginning, I do not hesitate in declaring it as my opinion that quinine as an eliminator of the poison from the system, and sulphuric acid as a detergent to the throat, are decidedly as much a specific for diphtheria as quinine is for intermittent fever, or iodide of potash and bichloride of mercury are for tertiary syphilis."—*Ibid.*

#### THE TREATMENT OF SCROFULOUS OPHTHALMIA

Mr. H. C. Lawrence (*Medical Press and Circular*) says: "The marked digestive derangement has benefited from a mercurial purge, followed by a course of non-mercurial aperients until the evacuations become normal; next a plain, nourishing, and unstimulating diet, to which milk contributes largely, is beneficial. Meat should not be given too freely. Most of the patients are ill-nourished when scrofulous ophthalmia manifests itself; partly from poverty, partly from digestive imperfections. To feed these two generously virtually promotes starvation; the fuel becomes excessive for the combustion power of the invalid. Cod-liver oil requires regulation in use. Instead of regarding it as a specific, my own experience has led me to consider it hurtful in some cases. The cases for its use and non-use may be differentiated thus, as Sir William Lawrence and Niemeyer have noted: 1. The 'torpid' constitutions, who are clumsy and thick-set in build, and exhibit a tumid upper lip and enlarged

nose, and have abundance of adipose tissue; by these cod-liver oil is not required, and it may prove injurious to them. 2. The 'erethitic,' with slender frame, lack of fat, and accelerated pulse, and over-active nervous system largely benefit from the use of cod-liver oil. These cases have procured for it the name of an anti-scorfulous remedy. (Niemeyer.) The photophobia has been relieved at first by the use of bromide of potassium, and the relief maintained by the administration of quinine. Quinine employed after potassium bromide has appeared more efficacious than when used alone. Relapses of intolerance of light have yielded to similar treatment. Fresh air, and plenty of it, is imperative. Cold shower-baths in summer, sponging with tepid sea-salt water in winter, have proved valuable auxiliaries. For local treatment, a green shade, made like the peak of a rifle-cap, is preferable to one fitting close to the eyes, the latter being injurious. Paddling of the eye with cotton wool to prevent friction of the lids appears to me neither necessary nor advantageous; equally good if not better results having followed frequent poppy fomentation instead, allowing free exposure to air, with shade from light. When the acute symptoms have subsided, the utmost possible benefit has ensued upon the use of poppy fomentation used as a douche to the eye, at first warm, then tepid, ultimately cold. The spasm of the orbicularis oculi seems to be much lessened thereby. Counter-irritation in the form of linimentum iodi painted behind the ear is preferable to blistering. Scrofulous constitutions resent blisters, secondary cutaneous eruptions and swelling of the neighboring glands being apt to follow. Frequency of counter-irritation, however, short of producing a breach of skin and glandular enlargement, seems not only indicated, but is found practically to be very useful. Nitrate of silver has proved itself injurious when applied to the conjunctiva in scrofulous ophthalmia, and solution of atropine less useful in allaying irritation temporarily than frequent anodyne fomentation. Atropine should be reserved to insure dilatation of the pupil when necessary. Iron is preferable to quinine in marked anæmia, but I have not sufficient evidence to prove its greater efficacy over quinine in promoting repair and nutrition in ulceration of the cornea, as some authors assert, while quinine exerts a marked effect in lessening the photophobia scrofulosa."

#### RADICAL CURE OF HYDROCELE WITH INJECTION OF CARBOLIC ACID.

*Rah. Allg. Med. Central-Zeitung.*

Instead of the customary puncture and subsequent injection with iodine-tincture, which always produces pain and confines the patient to bed for some days, Prof. Hüter recommended an injection



tion of carbolic acid, two per cent. The author has tried this method, and recommends it highly. There was no pain whatever, either during or after the injection; the patient took a walk immediately after, and would not stay at home on the second day. On the fifth day there was no swelling or tenderness, and the hydrocele could be considered cured. This plan of treatment, therefore, surpasses all the previous ones in painlessness and radical cure, and is, therefore, warmly recommended by the author. E. F.

#### TREATMENT OF ORCHITIS.

Dr. John K. Spender in the Medical Examiner, August, 1876, calls attention to the possibility of curing orchitis without surgical interference. The plan he adopts is to administer antimony in small and repeated doses for, at least twelve or fourteen hours. He narrates a case of a young man who had received a blow on the left testicle, and who was seen a few days afterward. Recourse was had to hot local applications, and a draught containing twenty minims of antimonial wine, with two minims of tinct. opium in an ounce of spearmint water, was directed to be taken every hour for twelve hours, then gradually at longer intervals. Pain was relieved simultaneously with the establishment of a profuse diaphoresis. Within three days the man was virtually well. The same mode of administering other drugs may be adopted with benefit, as in many cases success depends upon keeping the medicine constantly in the system.—*The Doctor*.

#### HYDRATE OF CHLORAL IN PUERPERAL CONVULSIONS.

Dr. Chouppe, having had the opportunity of observing carefully a considerable number of cases of puerperal convulsions, has come to the conclusion that, of all the means we possess, the hydrate is the most reliable for treating this disease. In twelve cases in which it was alone employed the termination was successful, although in some of these the state of things seemed desperate when it was commenced. He thinks, indeed, that it should be resorted to even before the disease becomes confirmed, whenever the woman, exhibiting albuminuria and œdema, complains of headache, ringing in the ears, hallucinations of vision, restlessness, cramps, or vague pains in the limbs, etc. When there is trismus present it should be given in enemata, which have also the great advantage of being able to be given during the paroxysm. The doses will vary according to the tolerance of the patients and the severity of the paroxysm, but it is necessary to commence with a pretty strong one (especially if the paroxysms are violent and close upon each other), in order to make a powerful and quick impression.

After a calm has been obtained, and if the attacks do not recur, some smaller doses may be given during the next twenty-four hours or so; but if the attacks recur large doses must again be resorted to until the paroxysms have completely ceased. In an enema we may always begin with thirty grains, repeating this at the end of ten minutes; and by the mouth at least forty-five grains should be given at once, fifteen grains being repeated every quarter of an hour. In a violent attack the dose required will vary from one hundred and twenty to one hundred and eighty grains; and it may even be requisite to resort to hypodermic or intravenous injection. In all cases it is of importance to get at least sixty grains rapidly taken, and to prolong the use of the chloral for a tolerably long time after the cessation of the convulsions.—*Gazette Med.; Amer. Jour. Med. Sciences*.

#### ACTION OF SALICYLIC ACID IN DIPHTHERIA.

L. Letzerich states that diphtheritic organisms (fungi obtained from the urine of children suffering severely from diphtheria, and consisting of bacteria, masses of protoplasm and micrococci) placed in a close vessel with solution of salicylic acid containing 0.35 of the acid, one part of spirit and 59 of water, when examined after an interval of five months, were all found lying dead at the bottom of the vessel. A few drops of weak solution of salicylic acid (of about one-third the above strength) brought into contact with diphtheritic organisms arrested the movements of the bacteria present gradually; stronger solutions arrested them suddenly. The plasma corpuscles lost their brilliancy and acquired a double outline, as if they were surrounded by an extremely delicate membrane; the substance of the protoplasm appeared to contain bubbles of air. Letzerich treated seven cases of diphtheritis with gargles of salicylic acid, and all of them successfully. In two other instances powdering the surface with a little dry salicylic acid proved very effective. From these and other observations and experiments he believes that salicylic acid is a powerful and anti-diphtheritic agent.—*Centralblatt für die Chirurgie*.

#### TREATMENT OF OTORRHOEA.

Paulsen\* claims to have met with excellent results in the treatment of otorrhœa, uncomplicated by caries or large polypi, by means of a mixture of carbolic acid and olive oil, ten parts of the former to one hundred of the latter. He has found it much more effective than astringents or other methods which he has tried, and the combination of the acid with the oil was

\* Monatschrift für Ohrenheilkunde, No. 2, 1876.



much better than the acid with water. His method of application is to cleanse the ear thoroughly by cotton or a probe, avoiding syringing unless it is absolutely necessary, and then, dipping a tampon of cotton in the solution to apply it to the secreting surface and there leave it till the next day, when the same process should be repeated. In this way he has succeeded in relieving obstinate otorrhœas even when complicated by small granulations.

Politzer \* gives a résumé of his experience in the use of caustic solutions of nitrate of silver in the treatment of otorrhœa, as recommended by Schwartze. He had already found concentrated solutions of nitrate of silver useful in the destruction of granulations in the external meatus and on the drum-membrane, but weak solutions he found of comparatively little value in simple chronic suppuration. Stimulated, however, by Schwartze's publications of 1868 with regard to the caustic treatment of purulent aural catarrh, in which solutions of twenty grains of the salt to an ounce of water were used, he was led to try this in simple, uncomplicated otorrhœa, and now advises the use of even stronger solutions than those of Schwartze, namely, one part of the salt to ten or eight of water. Great stress is laid, however, on the method of application, and it is probable in practice that failures often result from the want of attention to these minutiae and from the lack of personal attention on the part of the physician. Above all it is important that all secretion be removed from the middle ear by inflation, either with the Politzer-bag or by the catheter, and that then the meatus be thoroughly syringed out; this being done, the meatus must be carefully dried by pledgets of lint or cotton, in order that the solution may come in contact with the diseased mucous membrane. Any secretion left in the ear will unite with the silver to form an albuminate of silver.

For cauterizing the middle ear ten to fifteen drops of the solution should be poured into the ear with the head inclined to the opposite side; if the drum-membrane is largely destroyed, the solution readily finds its way into the tympanum; if, however, there is but a small perforation, it is necessary to inflate the tympanum or else to force the solution into the cavity by pressing the tragus down against the meatus. The only unpleasant results met with in these applications were smarting in the pharynx when the solution ran down the Eustachian tube, and a dizziness produced by the pressure on the labyrinth: the former passes off in a few hours, and the latter is relieved by inflation of the tympanum.

It is necessary that the solution should remain in the ear long enough to produce a decided slough of the membrane, and for this purpose one to two minutes is sufficient. A less time than that merely produces a grayish sediment

from the union of the silver with the epithelium and mucus, and this comes away in a few hours at the longest, while an effectual slough does not come away for twenty-four hours or even longer. The superfluous solution, after producing the slough, should be syringed out. Neutralization by means of a solution of salt, as advised by Schwartze, is not considered necessary by Politzer. The action of these concentrated silver solutions in checking the discharge is less dependent on the duration of the disease than on the condition of the mucous membrane and the general health, and it is also more certain where there are no granulations, although Politzer has seen such granulations disappear very rapidly under this treatment.

Schwartze's claims that a nearly certain cure followed the use of the caustic applications where the otorrhœa was uncomplicated are not confirmed by Politzer, but in cases where it was used and failed to check the discharge he has afterwards frequently obtained a good result from the insufflation of pulverized alum in minute quantities, and he considers the combined use of the concentrated silver solution and the powdered alum as the most effectual method of treating chronic suppuration of the middle ear. He recommends that, if after eight or ten applications of the caustic, the secretion does not diminish, the alum be used.

The same care should be used in applying the powder as the silver; the ear should be thoroughly cleansed and dried and the powder blown in in small quantities against the secreting surface, the physician satisfying himself by inspection that the surface is covered white. If the secretion is not profuse, the powder will remain in the ear at least two days, and if on the third day the powder still remains dry and in position, it is recommended not to syringe the ear, but to allow the powder to chip off of itself. If, however, the powder has become moist, the ear must be thoroughly syringed to free it from the masses of alum and secretion which occasionally adhere so firmly as to require also some careful manipulation with the probe for their removal. As experience teaches that, frequently, by the day after the syringing the secretion has ceased entirely, it is advisable not to make the next application till satisfied by waiting that the discharge still continues.

#### CALOMEL.

Dr. Duckworth, in *Practitioner*, says: "I am satisfied that in many minor disorders of children nothing can take the place of calomel as a purgative, and much time is often lost by beginning with drugs that are accounted more simple. The only medicine that appears to me to approach calomel in value is castor oil; but this is constantly a source of trouble from its disgusting character. I find that calomel is distinctly preferable to gray powder as a purgative, just as for

\* Archiv für Ohrenheilkunde, ii. 1.

other purposes strychnia is to milder preparations of nux vomica. Its action is smarter and more decided. It has also the great merits of being tasteless and of exciting no nausea, and its bulk is small. In strumous children, or in healthy ones who suffer occasionally from gastric catarrh, with tenderness and some torpidity of the liver, no medicine is comparable to a purgative containing calomel. After its action a copious bilious stool or two are passed, the tongue is observed to become cleaner, the feverishness pertaining to this state subsides, and the child becomes brighter, and has restored appetite. A so-called simpler treatment with soda and citrate of potash will often fail to yield these results, and so, too, will repeated doses of rhubarb and senna."

#### TREATMENT OF ALBUMINURIA.

Dr. Hall, after the clinical use of various forms of medication in albuminuria, sums up his experience and theory for treatment in the following words: Dr. Southey attributes the success of the employment of the tartrate of potash in Bright's disease to the abundant diuresis of alkaline urine..... I am speculative enough myself to imagine that an alkaline fluid, passing through the urine tubes, has some similar action to that of weak soda or potash solutions upon sections of dead kidney-tissue under the microscope. I mean that fat granules are saponified, cells are rendered more translucent, the interstitial tissues become looser, and the circulation is thus facilitated..... As a general rule, far too little attention is paid by the medical attendant to the diet of the patient; that is to say, the directions given are vague in the extreme; but in acute albuminuria, as in typhoid fever, any indiscretion in the food may be visited with the most severe punishment; an attack of convulsions may be caused by excess, just as I have seen perforation result from taking solid food too early in typhoid fever. I would sum up the treatment of acute Bright's disease in the following words:

"1. Milk and water with arrowroot; no solid food.

"2. Mild diuretics, such as the citrate or bitartrate of potash, with a free supply of water.

"3. The skin to be kept just moist.

"4. A daily evacuation of the bowels." — *Boston Journal*.

#### NESTLÉ'S FOOD FOR BABIES.

BY C. P. PUTNAM, M.D.

During last summer the attention of a number of physicians in this neighborhood was called to a food for babies, little known here, Nestlé's Lacteous Farina, made in Vevey, Switzerland, the use of which has some decided advantages, in spite of its not being the perfect substitute

for mother's milk which every patent food claims to be.

Mr. Astié, the agent for the food in New York, brought with him to Boston recommendations from various sources, and some experiments with it have been published in foreign journals, to one of which I shall refer later. More or less of the food had been sold in Boston in preceding years, but until this summer apparently little or none since it has been packed for transportation in tin boxes, which alone are said to be sure to protect it from spoiling during the voyage from Europe.

In one respect the food has a practical superiority over all the numerous food that are in common use here, namely, it comes in a dry form, and yet only water, no milk, is required in preparing it for use. It is well known that bottle-feeding is made difficult almost more than in any other way by the changes that milk undergoes either at the hands of the milkman, or under atmospheric influences, or from want of care between the time when it leaves the cow and the time when the last of the evening's or morning's supply is given to the baby.

Although water only is used in cooking the food, it consists almost entirely of milk in the form of powder, mixed, as is claimed, with bread baked for the purpose, of the best flour, of which only the most nutritious part, the crust, is used. The milk is brought fresh from large dairies belonging to the manufactory at Vevey, and, having been tested, is poured into steam-heated vessels and condensed in a vacuum at a nearly uniform temperature, not above 120° F. The powder of milk and bread crust which results is very fine. Lebert says that he found grains  $\frac{1}{125000}$  of an inch in diameter, and that grains of starch were found only in fragments.

In preparing the food for use, one part is mixed with from six to ten parts of cold water, which is then boiled while stirring. This cooking may be intrusted with comparative safety to unskilled hands,—a very important matter,—for the food has no tendency to ball or cake, as farinaceous substances are apt to do, and it is not likely to burn. It is not even necessary to begin by making a smooth mixture with a portion of the water,

Ehrendorfer, assistant in Monti's poliklinik in Vienna, reports\* that this food was given to twenty insufficiently nourished and forty sick children from five to twenty months old. Of these, fifty-one continued to take it until they were well, while with nine it was discontinued either because they did not like it or because they did not improve. Medicine was also given in these fifty-one cases, but the good results were attributed largely to the food.

Ehrendorfer concludes that the food is especially valuable in making up for a deficient supply

\* *Jahrbuch für Kinderheilkunde und physische Erziehung*, 1874.

of mother's milk, and that it is also often serviceable in cases of diarrhoeal diseases (the less so the younger the child,) especially in diarrhoea consequent on weaning, when the most striking results appear to have been attained.

He compares this food, though in an indefinite way, with fresh country milk, with Liebig's food, and with condensed milk, and expresses the opinion that no one of them possesses decided advantages over the others. It would seem, however, that, whatever might be the result of more extended experiments he had hardly done justice to his own experiments as they stand, for one could not expect to give any substitute whatever for mother's milk to sixty babies taken as they come, and find it succeed with as many as fifty-one of them.

Monti has given the food to very young children in private practice, and is of the opinion that it is not appropriate for children under six weeks of age. We do not hear, however, that it did not suit any children under that age with whom it was tried, and the statement as it stands is of so universal application to all artificial foods that it does not seem certain that it shows a peculiar property in this one.

I have given the food to a good many children with essentially the same result as that reported by Ehrendorfer. Generally it was well liked and well borne; occasionally it was not retained by the stomach, or was not liked by the baby. My impression is that it is not likely to be successful as often as Liebig's food, when the latter is made entirely in the kitchen every day and not from an extract, but the difficulty of making it in this way count sadly against it. It is hardly necessary to say that Nestlé's food is not going to prove a perfect substitute for mother's milk; few of us expect that of any artificial food.

It is, however, fair to recognize that it is supplied in compact form, is easily cooked, is comparatively safe from the accidents from which milk often suffers, especially in the city; that most babies like it, and that it generally does not disturb the digestion, and is nutritious.—*Boston Medical Journal*.

#### WHEN AND WHY WERE MALE PHYSICIANS EMPLOYED AS ACCOUCHEURS?—

Dr. Wm. Goodell (*American Journal Obstetrics*, August, 1876), in a very interesting paper answers the above question. It was just subsequent to the discovery of the art of printing that male physicians began to act as accoucheurs, and thus destroy the monopoly of midwifery by midwives. The reason for this change seemed to lie in the fact that the people became wiser, and read more books, so that they could appreciate the ignorance of the midwives. Physicians developed with the times, the midwives did not. The former wrote elaborate works on obstetrics, which the latter, with rare exceptions, could not even read. What more natural than

that intelligent women should prefer the teacher to the mapt pupil—should place their lives in skilled hands rather than in those which were unlettered. What more inevitable than that the male physician who was hurriedly sent for in cases of emergency, or was kept waiting in an ante-chamber for such emergency, should, despite tradition, prejudice and religion—should, in spite of himself, for it was long deemed dishonorable for him to practice midwifery, ultimately usurp the place of the midwife by the bedside of the woman in travail?

#### A SIMPLE METHOD OF TREATING UMBILICAL HERNIAS IN INFANTS.

M. Archambault has for some time past employed with gratifying success the following plan in the treatment of the umbilical hernias of infants. A piece of white wax is softened, and fashioned with the fingers into a ball, which is then cut in two, so as to form two hemispheres. One of these hemispheres, which must be of a size proportionate to the umbilical ring, is applied to it in such a way that its spherical surface securely fills the opening, and is then retained in position by a strip of plaster. Instead of wax we may use gutta-percha, previously softened in warm water. Both of these substances, about two hours after their application, become sufficiently softened to adhere to the skin. If the plaster excite cutaneous erythema, it should be removed every two days, and the skin powdered with rice-powder.—*Le Bordeaux Medical*, September 12th.

#### FAT MEAT AS AN EXTERNAL APPLICATION.

In the *Virginia Medical Monthly*, Dr. W. T. Ennet, of North Carolina, relates the following experience in diphtheria:—"My aunt, who, was in Hartford two years ago, when the disease was raging so terrifically there, being at my house this summer, when it was killing whole families in Wilmington, and was also terribly fatal to the surrounding country, asked me to try the Hartford doctors' treatment, which was the same as ours, with the exception of external application of 'fat meat.' I could not nor cannot see the virtue, but promised to try it; I used it, and my patient got well. I still did not look upon it as affecting the disease at all. I used it again and again, and the patients all got well. I tried to study out some physiological action, but could not. I wrote to an eminent physician in Hartford, and he writes me, 'We regard it as an old woman's remedy; but the doctors all use it, and since its use the mortality has not been more than one-third. What is it and why it is, I don't know; but might it not have some antidotal action on the poison?' Since then, I was called in consultation in the adjoining neighborhood, where the attending physician had lost three or four in the one family, and another patient was

almost dead. I was almost ashamed to recommend my fat meat, but I did it, and the child got well. Of course, we used all other necessary treatment. I certainly did not rely upon it alone; but, as it cannot possibly do any harm, I shall continue to use it as an external application."

Professor J. Lewis Smith, of New York, considers fat salt pork to the throat very valuable in anginose scarlatina. He finds it a safe and efficient counter-irritant, so decided in action that some skins cannot support it but for a short time.

#### THERAPEUTIC NOTES

##### QUININE INJECTIONS IN SUNSTROKE.

The experience of last year in India, and of this summer in this country, speaks strongly for the value of hypodermic injection of quinine in sunstroke. Five to ten grains may be thrown under the skin, of course using the cold douche, etc.

##### FOR BURNS.

|                     |        |
|---------------------|--------|
| R. Glycerine,       | ℥ v    |
| White of egg,       | ℥ iv   |
| Tincture of arnica, | ℥ iij. |

Mix the glycerine and white of egg intimately in a mortar, and then add gradually the arnica. Apply freely on linen cloths night and morning, having previously washed the burn with Castile suds.

## THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D. L.R.C.P., LOND.

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MONTREAL, NOVEMBER, 1876.

We understand that the amendments to the present Act, desired by the College of Physicians and Surgeons of Lower Canada, have been put into shape and placed in the hands of Mr. Loranger, who will introduce them to the House. Petitions in their favor have been, and, as we write, are still being very numerous signed in the cities and leading towns of the Province; but in the country, it is a difficult matter to get at scattered practitioners. Circulars have, however, been sent out by Dr. Fenwick, the Registrar of the College, to all members and licentiates, asking for authority to

attach their names to the petitions. The reply to this appeal has not been as large as we desire to see; but this is due, we know, not to any objection to the petition—at all events in the majority of cases—but simply to carelessness. If these lines should be read by any who have received the circular alluded to, we hope they will at once give the necessary authorization to have their names attached. We do not really know what measure of opposition will be offered these amendments, or whether the supporters of the Medical Bill, introduced last Session and advanced two stages, will press it to its third reading. We, however, trust that they will see the wisdom of withdrawing, and of leaving to those who for the past thirty years have, in their corporate capacity, been the legal custodians of the profession of this Province, the duty of seeking such alterations in the Act of Incorporation as the change in public sentiment demands. We are informed that opposition to the College amendments was offered to be withdrawn, provided the clause in the old act, enforcing on licentiates of the College four years of probation before becoming eligible for election as members, was expunged, and all licentiates of the board allowed to become members at once upon the payment of a merely nominal fee. We are glad to be informed that such a proposition was rejected, for its absolute unfairness, not to say anything of its inadvisability, must be apparent. Especially at this time is it essential that the management of the College should be entrusted to members of the profession, who, by their age, professional standing, and general reputation shall command alike the confidence of the medical profession and the public. We have not as yet in the Dominion attained the length of manhood suffrage, and we hesitate not to give it as our very strong opinion that anything approaching universal medical suffrage would at this moment, and for the matter of that, at any moment, result most disastrously to the interests of the profession in this Province. We must remember that other eyes are upon us, and that if we wish to obtain reciprocity with other boards, a certain amount of conservatism is necessary. Licentiates of four years are now eligible for election. This, after thirty years of experience, is still considered by those best qualified to judge to have been a wise provision, and its continuance

is asked for. We see every reason why this request should be granted by the Legislature—none why it should be disallowed. We are hopeful of the result, for we cannot believe that our Provincial Parliament will deliberately ignore and cast to one side a body so respectable,—not alone from its legal status, but from its composition, embracing, as it does, representative men in their various sections. With the active support of the Hon. Dr. Church, the Treasurer of the Province and one of the Governors of the College; of Dr. Cameron, the member for Huntingdon, and other medical men in the House, we believe the wisdom of the amendments will be appreciated. We, however, advise the most active work and watchfulness on the part of every one interested.

In our account of the International Medical Congress in our last issue, by inadvertence we stated that the chairman of the section of Dermatology and Syphilology, was Dr. James C. White, of Buffalo. This is an error, as Dr. White resides in Boston. The error arose from confounding the chairman of this section with Dr. James P. White, Professor of Midwifery in the Buffalo Medical College, who was present at the Congress, took an active part in its proceedings, and was, in conjunction with Dr. Joliffe Tuffnell, of Dublin, one of the "big men" of the Congress.

#### COURTESY.

We have to thank Dr. H. W. Nelson, of Sacramento, California, for a number of very interesting medical pamphlets, which we have read with much pleasure. We are sorry we did not see Dr. Nelson during his visit to Montreal.

#### PERSONAL.

Dr. Edmond Robillard, of Montreal, one of the Governors of the College of Physicians and Surgeons of Lower Canada, left Montreal on the 14th November, for an extended trip in Europe. We understand that Dr. Robillard will pass the greater portion of the winter in Paris, but, before returning, will visit the principal places of interest on the continent and in Great Britain. He will not return before next June or July.

We regret to hear of the illness of Dr. James Hall, (M.D., McGill College, 1866,) of Magog, Q., son of the late Dr. Archibald Hall, for many years professor of obstetrics in McGill University. Dr. Hall intends passing the winter in Colorado.

Dr. McMillan, (M.D., McGill College, 1860,) late of Rigaud, Que., has removed to Montreal and commenced practice.

Dr. W. Smith (M.D., McGill College, 1876,) has commenced practice in Montreal, as has also Dr. Hayes, late of Dublin, Ireland.

Dr. Duncan (M.D. McGill College, 1874) is serving as surgeon on the Allan Line of Mail Steamships.

Dr. Hunter (M.D., Bishop's College, 1874) is practising in Ottawa.

Dr. E. A. Duclos (M.D., Bishop's College, 1873) has removed to St. Pie.

Dr. Cattanaach, (M.D., McGill College, 1871,) has resigned his position on the Allan Line of Mail Steamships. He returns to England the end of November, to devote a short time to hospital attendance.

Dr. Thomas Laycock, physician to Queen Victoria, died in London recently. Dr. Laycock was born in New York in 1812, and studied his profession in the most advanced schools of London, Paris and Gottingen, at the latter of which he graduated as Doctor of Medicine and Surgery. In 1855 he was appointed Professor of Practice of Medicine in the University of Edinburgh; in 1869, Physician to the Queen in Scotland, and at the same time was Lecturer on the Practice of Medicine in the York Medical School. He suggested the commission to report upon the health of towns in England; sketched a plan for state medical operations, and wrote several important papers on medical topics.

—The well-known house of Macmillan & Co., London, publishers of the *Practitioner*, have undertaken the publication, in England, of "Microphotographs in Histology," the monthly work published at Philadelphia and conducted by Drs. Seiler, Hunt and Richardson. A large edition is required by the English profession.

*Atlas of Skin Disease.* By LOUIS A. DUHRING, M.D. Part I. Published by J. P. Lippincott & Co., Philadelphia. Montreal: Dawson Brothers.

Skin diseases,—many of them at least,—are extremely difficult to diagnose; and it is said by those who profess to be judges in this matter, that, at all events in this country, this difficulty is increased by the fact that this class of affection is usually studied from plates, published either in Great Britain or the continent. These do not give a true idea, as a rule, of the diseases as they are met with in America, climate, apparently operating so as to materially change or modify in many respects the chief peculiarities of the disease, while new varieties are met with. The purport of this work is to produce an atlas of skin diseases as they are seen in this country, and if succeeding parts are equal to the one now before us, the Messrs. Lippincott are about to produce a work of the greatest possible value. Part I. contains four plates with letter press descriptions, viz.:—

Eczema (Erythematosum,)

Psoriasis, Lupus,

Erythematosus, and

Syphiloderma (Pustulosum).

Each of these is executed in a nearly life-size chromo-lithograph, painted from life. The Atlas will be published quarterly.

*A Manual of Midwifery.* By Alfred Meadows, M.D., London, F.R.C.P., Physician Accoucheur to St. Mary's Hospital. Second American, from the third London edition, with one hundred and forty-five illustrations. Philadelphia: Lindsay & Blakiston. Montreal: Dawson Brothers.

This volume is exactly what it represents itself to be by its title page, and that is more than can be said of many volumes. It is a manual, easily handled, and briefly expressed; contains the essence of the theory and practice of Midwifery,—couched in good language and in a pleasant style. For students or for practitioners constantly engaged in practice, it is just such a work as we can confidently recommend. It is illustrated by a number of wood cuts, which enable students to more readily understand some of the difficult points.

*Medical Thermometry and Human Temperature.* By E. Seguin, M.D. New York: William Wood & Co., 27 Great Jones Street. Montreal: Dawson Brothers.

It seems almost useless for us to recommend, in the strongest possible terms, this volume to our readers, but we do so, however, and hope that every one who reads this paragraph will obtain the work. We consider a medical library as incomplete without it as is a medical man who attempts to treat disease without the use of the thermometer. The volume opens with an historic account, showing that in the earliest ages the significance of temperature was fully recognized. Little by little, however, the value of temperature seems to have become disregarded, and, although several attempts seem to have been made to revive it, it was not till 1740 that the first accurate observation on temperature in healthy men and animals was published. Then follow four hundred pages devoted to the consideration of temperature under varying conditions in the human body in a state of health, and likewise in nearly every important disease. The author of this work is a prominent member of the profession in the American metropolis, who has done more, perhaps, than any other man in that city to popularize, if we may in this connection use such a word, the use of the thermometer.

#### MEDICAL SOCIETY OF LONDON.

Mr. William Adams and Mr. Richard Davy, who were delegates from the London Medical Society to the International Medical Congress, at Philadelphia, arrived home in time for the annual meeting, which took place early in October. They made a special report concerning their visit, and spoke in the highest possible manner of the genius and ability of American surgeons, and of the very great success of the Congress. Both delegates appear to have been delighted with their American trip.

#### AMERICAN GYNÆCOLOGICAL SOCIETY.

The first annual meeting of this Society was held in New York, on the 14th, 15th and 16th of September, under the presidency of Dr. For-



dyce Barker. Dr. Barnes, of London, England, was present, and read a paper.

The Society embraces the representative men from all the great centres of activity. Admission is conditional on approved work. The choice of honorary members is also strict. At present four only have been elected, viz.:—Dr. Robert Barnes and Mr. Spencer Wells for England, Dr. McClintock for Ireland, and Mr. Thomas Keith for Scotland.

#### BRANT COUNTY MEDICAL ASSOCIATION.

The quarterly meeting of this Association, was held in the Kerby House, Brantford, on Tuesday, Sept. 5th. The following gentlemen were elected officers for the ensuing year: Dr. Digby, *President*; Dr. Philip, *Vice-President*; Dr. Harris, *Secretary and treasurer*.

#### LINDSAY AND BLAKISTON'S VISITING LIST.

Punctually, on time, we have received a copy of this most valuable pocket record, which is now issued for the twenty-seventh time. We consider it "*multum in parvo*," and can most conscientiously recommend it to our readers. We have used it for the past twelve years, and would not be without it for ten times its cost. We could not say more than this in its favor, were we to write a page.

#### NERVE STRETCHING IN TETANUS.

In a case of tetanus which occurred in the Montreal General Hospital, Dr. Drake cut down upon the sciatic nerve and stretched it. The patient was then put upon chloral hydrate and calabar bean. The operation seemed at first to afford considerable relief to the patient, but after a time the spasms returned and he ultimately died of lockjaw.

#### MISTAKEN CHARITY.

The British Medical Journal says: "It has for many years been the custom at University College Hospital for the honorary medical staff to resign the whole of the fees paid by the

students of clinical instruction to the Committee of Management, to enable them to defray the expenditure for general purposes. The sum so surrendered during the year 1875 was no less than *two thousand three hundred and forty-four pounds*, or something like one-third of the ordinary income, excluding extraordinary donations, legacies, and interest on investments

#### POISONING FROM CANNED BEEF.

A scientific commission has completed an investigation of the alleged poisoning of a family by canned corn beef, in New York, and it is gratifying to learn that these experts have decided unanimously that the poison was the result of exposure of the meat after it was uncanned, whereby it became putrid or tainted. They declare that there is nothing deleterious about the canning process, as is abundantly proved by the immense consumption of canned fruits and vegetables without notable cases of injury in any part of the country which cannot be accounted for by some imprudent acts of the consumers.

#### SINGULARLY SLOW PULSE.

The *Gazette des Hopitaux* states that at the Lariboisiere Hospital a patient, a *chiffonnier*, seventy-seven years of age, came in to be treated for hydrocele, in all other respects seeming well and jovial in his manner. It was almost by accident discovered that he had a pulse only of 21. It is regular, the two sounds of the heart and the short interval of silence that separates them occupying scarcely half a second. But the "grand silence" is extraordinarily prolonged, so as to continue nearly two seconds and a half. During this absolutely nothing is heard in the heart—not the slightest *souffle*. But with the first sound a very distinct *souffle* is heard, which, continuing during the "petit silence," terminates suddenly with the valvular clap which constitutes the second sound. The heart seems large, its apex beating more externally and lower down than in the normal state. There is some emphysema of the lungs. The pulse was counted carefully four days in succession, and the intervals were found to be perfectly equal, and the same on both sides.

## MEDICAL STUDENTS, 1876.

The following is a list of the number of students of medicine registered at the Royal College of Surgeons of England this session from the metropolitan schools, distinguishing the new entries for the session. It will be seen that the number of new students is large, especially at the great city hospitals:

|                         |                                 |
|-------------------------|---------------------------------|
| St. Bartholomew's.....  | 374, including 131 new entries. |
| Guy's .....             | 317 " 95 "                      |
| University College..... | 279 " 79 "                      |
| St. Thomas's.....       | 177 " 43 "                      |
| St. George's.....       | 136 " 33 "                      |
| London.....             | 123 " 35 "                      |
| King's College.....     | 105 " 38 "                      |
| Middlesex.....          | 101 " 38 "                      |
| St. Mary's.....         | 82 " 26 "                       |
| Charing Cross.....      | 70 " 29 "                       |
| Westminster.....        | 28 " 9 "                        |

The gross number registered amounts to 1,793, including 546 new entries.

## AMERICAN PHARMACEUTICAL ASSOCIATION.

The Association held its twenty-fourth annual convention at Philadelphia, on the 24th of September. About one hundred and fifty members were in attendance, and the Association decided to accept an invitation extended to it by the Ontario College of Pharmacy, and meet in Toronto on the 4th of September, 1877.

## MEDICAL ITEMS.

Dr. Pearce, of Mars Bluff, S. C., reports that a negro woman—multipara—gave birth on the 11th September to five children—four died after birth, one lived several hours.—Sir William Ferguson has returned to London, much improved in health. He is about to gradually resume his professional occupation.—Dr. Brown Sequard, has settled in London, after an absence of thirteen years. He intends resuming practice.—Mr. William Clarke, C.E., who carried out the drainage and water supply of Calcutta, which have had so beneficial effect on the health of the city, has been invited to Australia, to advise upon the drainage of Sydney, N. S. Wales. —Dr. McKendrick, late one of the lecturers in the extra-academical school in Edinburgh, has been appointed Professor of Physiology in the University of Glasgow.—

Dr. Grainger Stewart has been appointed Professor of the Practice of Medicine in Edinburgh University, in place of the late Dr. Laycock. —A lady in London, under date of September 20th, 1876, has executed a will, before a well known firm of solicitors, bequeathing her body to the Royal College of Surgeons, for the purpose of dissection.—The *Medical Times* prints the following as a copy of a label taken off a bottle of medicine supplied by a firm of druggists of Cork:—"Caution.—To all medicines for outward application this label is attached to the bottles, in order to distinguish it from others for internal use, but persons unable to read should not be allowed to administer medicines, and never give or take a dose without perusing the label.—Signed —." —Dr. W. T. Gairdner, Professor of Practice of Medicine in the University of Glasgow, has been appointed physician to the Queen in Scotland, in place of Dr. Laycock, deceased.

## SCARLET FEVER PROPAGATED FROM MILK.

Dr. Buchanan, in his report on a recent outbreak of scarlet fever in South Kensington, says that the disease was apparently propagated through the agency of milk.—*Medical Record*.

## MARRIED,

At Dundas, Ontario, on the 10th of October, Charles O'Reilly, M.D., son of the late Dr. O'Reilly, of Hamilton, to Sophia Elizabeth, eldest daughter of the late George Rolphe, of Dundas.

## DEATHS.

At Montreal, on the 21st November, Clara Elizabeth Palmer, wife of Alexander H. Kollmyer, M.D., professor of Materia Medica, University of Bishop's College, aged 38 years.

At Mhow, Bombay Presidency, East India, on the 8th of October, Cornelia Nelson, aged 27 years, wife of Major H. W. Harris, 1st Bombay Lancers, and daughter of the late Horace Nelson, of Montreal, and sister of Dr. Wolfred Nelson, assistant Demonstrator of Anatomy, University of Bishop's College.

At Montreal, on the 18th November, inst., Ann Maria Mansfield Mullins, wife of Angus C. MacDonell, M.D.

At Ballarat, Australia, on the 28th July, 1876, Henry M. Mount, M.D., late of Montreal, aged 78 years.

At Montreal, on the 31st October, Julie Elizabeth Josephine Defoy, wife of Arthur Ricard, M.D., aged 36 years.

At Dundas, Ont., on the 11th October, Henry C. Rutherford, M.D., aged 68 years.

## Progress of Medical Science.

### TYPHOID FEVER.

By ALFRED L. LOOMIS, M.D.,

Professor of Pathology and Practical Medicine in the Medical Department of the University of the City of New York.

*Prognosis.*—Death may occur at any stage of typhoid fever. A typhoid patient is not out of danger until all tympanites, diarrhoea, and other abdominal symptoms, which indicate that intestinal changes are still progressing, have disappeared. Independent of complications, the duration, type, and intensity of the febrile excitement has more to do than all the other elements in determining the prognosis in any case of typhoid fever. The height of the temperature on the eighth day determines the range of temperature that may be expected on each succeeding day. If upon that day it is not higher than 104° F., or 105° F., and has been regular in its development (independent of complications), the prognosis is good; in uncomplicated cases it very rarely rises higher than the degree it has reached at that time. A prolonged high temperature (above 105° F.) after the first week renders the prognosis unfavorable.

In mild cases, during the second week a marked morning remission occurs, which begins early and continues until mid-day; the evening exacerbation is late, and by the end of the second week there is a marked and permanent fall in the temperature. In severe cases, the opposite conditions are observed. A sudden rise in temperature, or a rapid and extreme fall at any period of the fever, is a very bad omen; the latter often precedes the occurrence of a severe intestinal hemorrhage. Marked variations from the typical temperature of the disease indicates the existence of complications. Slight decline, accompanied by great fluctuation of temperature, during the third week, is an unfavorable symptom. The natural power of an individual to resist disease, especially the effects of prolonged high temperature, is a very important element in prognosis. The organ which is the surest indicator of such power (especially in typhoid fever), is the heart. If the pulse is full and regular, perhaps beating at the rate of 110 or 115 per minute, if the cardiac impulse is good, and a distinct first sound can be heard, even though at the end of the second week the temperature stands as high as 106° F., the prognosis is favorable. If, however, the pulse has risen to 120 or 130 per minute, if the apex beat is feeble or imperceptible, and the first sound of the heart is indistinct or altogether obscure, with a tendency to cyanosis and pulmonary oedema, the indications are that the patient's powers of resistance are failing, and

under such circumstances the prognosis must be unfavorable. It is not so much the rapidity, as the regularity, a sudden falling and a sudden rising of the pulse, that indicates the impending danger. The rapid rising of the pulse upon the slightest excitement is the most unfavorable indication, as it shows extensive heart-failure and a rapid giving way of vital power.

*Age.*—The influence of age is very great in determining the prognosis in any case of typhoid fever.

The prognosis is much better in children than in adults. Occurring in persons over forty years of age, the prognosis is decidedly unfavorable, even though the symptoms may not indicate a severe type of the disease.

In the case of those individuals who habitually use alcoholic stimulants, whose powers of resistance to high temperature is diminished, the rate of mortality is very great.

The puerperal state renders your prognosis especially unfavorable. The danger to the patient is equally great, whether the fever comes on prior to delivery or during puerperal convalescence.

In this fever there is greater danger to those who are suffering from any form of chronic disease, than to those who are in a healthy condition at the time of the attack.

The complications which influence prognosis are more numerous than those in any other disease.

I shall briefly allude to those which are intimately connected with, or dependent upon, the morbid changes ordinarily incident to the disease, and afterward speak of those which may be designated as accidental complications.

The parenchymatous changes which take place in the different organs of the body, during the progress of this fever, necessarily influence prognosis. For instance, the muscular degenerations of the cardiac walls and the consequent loss of heart-power, which favors pulmonary and other hypostatic congestions, and the diminished quantity of blood sent to the various tissues of the body, interfere more or less with their nutrition. Necrotic and gangrenous processes, sometimes met with in the cellular tissues of the surface, and along the line of the intestines, also the venous thrombi which so frequently develop in a protracted case of this fever, are, to a certain extent, the result of this cardiac weakness. It is apparent that the development of extensive cardiac degenerations must render the prognosis unfavorable.

Excessive cardiac weakness favors the development of blood-clots in the heart cavities; these may break up and cause embolism somewhere in the course of the general circulation, and thus lead to changes which may destroy life. Again, intestinal perforations, one of the results of the intestinal changes incident to the

fever, render the prognosis most unfavorable. The same is true of copious intestinal hemorrhages coming on after the third week of the fever, as well as of all those glandular changes which are a part of the natural history of the fever, and which I have already described.

Any of these changes may lead to complications which endanger the life of the patient, and consequently when they occur, necessitate a guarded, if not an unfavorable prognosis.

Some of the prominent accidental complications which may occur in the course of typhoid fever, but which do not belong to its regular history, have their seat in the respiratory organs. Slight bronchial catarrh is present in nearly every case, and can hardly be regarded as a complication. It is so much a part of the clinical history of the disease, that some have named this fever bronchial typhus. There is another much more serious bronchial complication, namely, catarrh of the smaller bronchi, or capillary bronchitis. This usually comes on during the second or third week of the disease, and, if extensive, greatly endangers the life of the patient. If then during this period of the fever you have sub-crepitant râles suddenly developed over the whole of both lungs, accompanied by great dyspnoea and an abundant expectoration of stringy mucus, you are warranted in giving an unfavorable prognosis.

Extensive oedema of the lungs occurring with, or independent of, capillary bronchitis and pulmonary congestion, sometimes comes on suddenly during the third week of typhoid fever, and indicates great failure of heart-power. The slightest indication of its occurrence should always be regarded with suspicion. It is not unfrequently accompanied by more or less extensive hemorrhagic infarctions of the lungs; these depend on embolism of some of the branches of the pulmonary artery, due to fragments of clots which have formed in the right side of the heart, the result of the cardiac weakness. They often lead to gangrene of the lung. It is sometimes impossible to diagnosticate their existence during life.

Pneumonia, when it complicates typhoid fever, is generally latent. It comes on very insidiously, and, unless you are on the watch for its development, and make frequent and careful physical examinations, it will pass unrecognized. It is more frequently developed during the third and fourth week of the fever, and usually is catarrhal rather than croupous in character. At first only single lobules are involved, but after a time an entire lobe becomes consolidated. When irregular variations in temperature occur during convalescence, or during the third or fourth week of the fever, there is reason to suspect the development of pneumonia. In the majority of cases the characteristic pneumonic cough and expectoration are absent. Whenever an extensive pneumonia complicates typhoid

fever, the prognosis is especially unfavorable.

Pleurisy does not occur so frequently as a complication of typhoid fever, as does pneumonia or bronchitis. When it does occur, pus is almost invariably the product of the inflammatory process. Usually it comes on late in the disease, comes on insidiously, and is quite likely to pass unrecognized unless frequent physical examinations of the chest are made. In many instances it is really a sequela of the fever, not developing until three or four weeks after the fever has run its course. Its occurrence must always be regarded as unfavorable; for a year or even longer time must elapse before recovery can take place, and even then recovery is doubtful.

Occasionally, laryngitis is a serious complication of this fever. It generally occurs in those cases where the fever has been very protracted, and there is great prostration. Its presence is marked by sudden and very intense inflammation of the mucous membrane of the glottis, which is liable to become cedematous, when death may suddenly occur. It may lead to ulceration of the mucous membrane. Whenever, during any stage of a typhoid fever, the characteristic symptoms of laryngeal obstruction occur, remember the danger of oedema glottidis and of extensive laryngeal ulceration, and promptly resort to those means which shall relieve the unpleasant symptoms, and avert the danger which threatens your patient.

Pyæmia may be met with as a complication during convalescence from typhoid fever, but it is not of as frequent occurrence as septicæmia. Whenever we have septic poisoning developed, with extensive sloughs in the intestines, the prognosis is exceedingly unfavorable.

Acute gastric catarrh is another complication of this fever, the possible occurrence of which must enter into your prognosis. A patient may have reached his fourth week, and be rapidly convalescing, his desire for food returning; you endeavor to hasten his recovery by increasing the quantity of food taken, or by allowing him to partake freely of such articles of food as are difficult of digestion. The result of this overcrowding, or of imprudence in diet, is irritation and inflammation of the enfeebled gastric mucous membrane. Vomiting of a stringy mucus occurs, which, by its prostrating effects, endangers or destroys the life of your already enfeebled patient. I would impress you with the importance of exercising the greatest care in regard to the diet of patients convalescing from typhoid fever. They should be restricted to milk and nutritious broths in moderate quantity until all danger from this complication shall have passed.

Disturbances of nerve function have been considered under the head of symptoms, but, not unfrequently, certain brain and nerve

lesions are developed, which cannot be classed under that head.

Cerebral œdema may complicate a typhoid fever during its third week, and give rise to symptoms of a grave character. A decided enfeebling of the mental powers, and a tendency to stupor, announces its occurrence.

Hemorrhagic extravasations on the surface, and into the substance of the brain, the result of degeneration of the walls of the cerebral vessels, occasionally occurs during the height of the fever. If the effusion is moderate, no marked symptoms are developed, but if a considerable extravasation takes place, it gives rise to symptoms of cerebral compression.

Meningeal inflammation is a rare complication.

The occurrence of any of these complications in any case renders the prognosis unfavorable.

You must remember that during the second or third week of the fever certain cerebral disturbances may occur, which seem to indicate the existence of some one of these complications, when really no cerebral lesion exists. Usually, these are present in patients who have had a continuously high temperature; in favorable cases they disappear after a few days. These have been referred to under the head of symptoms.

You will encounter various other disturbances of the nervous system, such as hemiplegia, paraplegia, etc., which may simulate those due to lesions of nerve centres, or local forms of paralysis and anæsthesia, which seem to be confined to individual nerves; but as these functional disturbances do not depend upon any anatomical changes, the prognosis in such cases is good.

Those changes in the kidney which are due to the parenchymatous degeneration which usually attends this fever, have been already noticed; but occasionally nephritis is developed as a sequela. The urine becomes scanty, is loaded with albumen, and contains blood and casts; the face and extremities become œdematous, and death may occur from uræmia. The occurrence of this complication necessarily renders the prognosis bad.

In a few instances under my observation, severe catarrh of the bladder had developed during convalescence, greatly complicating the case; in one instance the cystitis was accompanied by pyelitis.

Suppurative inflammation of the cellular tissue of the body, or cellulitis, especially of the surface, often complicates convalescence, and in some cases causes death. It is most liable to develop in those parts which have been subjected to long-continued pressure. Occasionally it is met with in the pharynx, and along the line of the lymphatics.

Accompanying these cellular inflammations, or occurring independently of them, not

unfrequently gangrenous inflammations of the integument occurs, giving rise to what has been called *bed-sores*. These gangrenous processes are most frequently developed at those points which have been subjected to the greatest pressure, on account of the position of the patient, such as the sacrum, nates, heels and shoulder-blades, etc. In the simplest form of *bed-sores* there is only a superficial loss of substance; in more severe cases the subcutaneous cellular tissue is involved; and in the worst cases the muscles and fibrous tissue. I have met with cases where the slough had involved the connective tissue and muscles, and laid bare the bony tissue.

A considerable number of typhoid patients who have lived through the fever, die either from the exhausting effects of these *bed-sores*, or from the septic poisoning resulting therefrom.

The possible occurrence of these complications must enter into the prognosis in every severe case, and the earlier they make their appearance the greater the danger.

We have now completed the list of principal complications which are to modify your prognosis in any case of typhoid fever. Before leaving the subject, I will say a word in regard to the *duration* and *mode* of termination of this fever.

Its average duration is from three to four weeks; a typical case extends over a period of four weeks. When the fever is protracted beyond the middle of the fourth week, in most instances this is due to some complication or to an extension of the intestinal ulceration. The period of greatest danger is at the close of the third week. Death rarely occurs before the fourteenth day. The prominent direct causes of death are: 1st. Toxæmia; 2d. Asthenia; 3d. Suppression of the excretory function of the kidneys; 4th. Hyperæmia and œdema of the lungs; 5th. Intestinal hemorrhage; 6th. Exhaustive diarrhœa; 7th. Intestinal perforation; 8th. Peritonitis, with or without intestinal perforation. In nearly all cases the failure of heart-power is directly or indirectly the cause of death.

*Relapses.*—After typhoid fever has run its course, and after the patient is entirely free from fever, quite frequently we have a new development of the fever; these developments are called relapses. Their course corresponds with that of the primary attack, only they are of shorter duration. The temperature rises more rapidly, the eruption reappears, the spleen enlarges, the intestinal and abdominal symptoms return, and all the prominent symptoms of the primary fever are rapidly developed. As a rule, the relapse is milder than the primary attack. If it terminate fatally the post-mortem examination shows, in addition to the cicatrizing intestinal ulcers of the primary attack, the recent intestinal changes of the relapse. The lesions of the relapse, although of the same character as

those of the primary attack, are less extensive.

It is very difficult to give a satisfactory explanation of these relapses. Some claim that they are the result of certain plans of treatment, especially the cold-water plan. This assertion lacks proof. Again, others hold that all relapses depend upon a new infection. Perhaps this is possible if the patient remain in the same locality and has the same surroundings as when he had the primary attack; but how shall we explain relapses in those who are removed from all the sources of the primary infection? Another explanation offered is, that a part of the typhoid poison has remained in the system, undeveloped during the primary attack, and that some time after this has passed the poison reproduces itself and sets up a second fever.

A more recent theory is, that the typhoid poison thrown off in the feces of the patient is reabsorbed and causes the relapse. Unquestionably, it is possible for healthy glands to become inoculated by sloughs thrown off from those first affected.

In many cases it is impossible to account for the occurrence of the relapse, and all of these explanations as to the cause in any case are more or less unsatisfactory.

In those cases which have come under my own observation, I have noticed that the splenic enlargement which has existed during the course of the fever does not subside with its decline; and that the tenderness along the line of the intestines, especially in the right iliac region, continues during the period between the original attack and the relapse. In some instances, apparently, the relapse has been brought on by indiscretion in diet, or by injudicious exercise on the part of the convalescent patient. Occasionally relapses have occurred when great care had been taken against any indiscretion or over-exertion.—*New York Medical Record.*

#### PUERPERAL FEVER AND SEPTICÆMIA.

Dr. Geo. Hunter read before the Medico-Chirurgical Society of Edinburgh (British Med. Journal, September 23, 1876) a paper on Puerperal Fever and Septicæmia, their relations and probable identity, with cases. He first alluded to the difficulty felt by the practitioner in publishing cases of puerperal fever; and then described some cases in his ordinary practice which preceded the puerperal ones. Two were in the same house; the husband had diffuse cellulitis of the arm after a puncture which nearly proved fatal, and his wife had a very bad attack of erysipelas. Other cases of erysipelas had large abscesses and great fetor, and one especially required very constant dressing and care by Dr. Hunter's own hands. The puerperal-fever cases were six in number, of which four died and two recovered. These cases were coincident with some most curious and serious results on the health of their nurses and families. *E.g.*, the mother of one, who nursed her, had axillary abscess of a most severe

type, with great prostration. Her sister, who succeeded her mother as nurse, had a most dangerous inflammation of finger, hand, and arm. The servant-girl, who washed the linen, had fever and sore-throat, and the husband a slighter form of the same in his tonsils. Another case similarly affected her mother, husband, three sisters-in-law, who all acted as nurses successively, and the husband of one of the latter. Dr. Hunter, by an exhaustive process of reasoning, traced out the chain of phenomena, and ascribed the commencement of the whole to the thoroughly septic condition of his own hands after the bad cases of erysipelas and abscess first alluded to. He described the extreme precautions he took as to cleanliness, and their good effect when once undertaken.

Dr. Simpson thought the society, and indeed the whole profession, were indebted to Dr. Hunter for his paper. It certainly required a great deal of courage to bring forward the series of disastrous cases so admirably detailed. The question now was, were we to retain the term puerperal fever? In the discussion previous to Dr. Hunter's paper there was a variety of fevers in women, all puerperal, because they occurred in the puerperal state. Thus, when typhoid fever or small-pox laid hold of a puerperal woman, there was danger of death, because she had never had them before. In one case of a lady, who had been sedulously guarded from infantile diseases, an attack of measles in her thirteenth confinement proved fatal in a few days. Now, were we to look on puerperal fever as identical with erysipelas? Sometimes the erysipelatous poison coming into contact with the vaginal or other canals caused symptoms similar to those arising after a surgical operation. Then there was the group of cases so well brought forward by Dr. Hunter, where the surgeon got impregnated with a poison which would give a surgical patient a fever with local manifestations from the introduction of poisons into a wound. This, as taught by the late Sir James Simpson, should be held as puerperal fever when the patient was a puerperal woman. There were two things, however, required from Dr. Hunter; viz., post-mortem examinations of the women who had died, and also of the fatal surgical case. This would, no doubt, have shown lymphatic inflammation, phlebitis, thrombosis, and metastatic inflammation. He had collected for his late uncle, in the dissecting-rooms at Vienna, the results of post-mortem examinations of patients dying after puerperal fever and after surgical operations. The results in both classes of cases were the same, especially where the surgical operation had been on the abdomen. The great danger in a puerperal patient lay in her condition. It would have been interesting to know the health of the puerperal women in the district at the time of Dr. Hunter's fatal cases, as it would have added to the value of his paper. He had undoubtedly carried a morbid agent; and it was, therefore, important to watch the kind of source from which such an agent might arise. Dr. Hunter had done so in his cases, but it might come from less striking sources. Thus, in a case of his



own, it was traced to the sore thumb of the nurse; and in a second instance it was also traced to the nurse, who had been dressing an old ulcer. Then, again, the obstetrician might get the poison from the fetid lochial discharge of a patient already confined, although it was doing the woman herself no harm. He felt much interested in Dr. Hunter's cases, and felt sure they all owed him thanks for it.

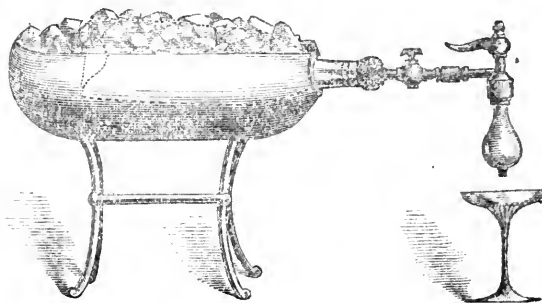
Dr. A. Macdonald wished simply to indorse Dr. Simpson's remarks. The contribution was valuable, and one much needed in science. There was always a certain amount of reluctance in furnishing such cases; and although the practitioner was honored by his brethren, yet the popular amount of credit was not in proportion to his deserts. No member would deny the view of puerperal fever advocated this evening. The only question was the bearing of antiseptic measures on these cases; whether by the diligent use of antiseptic agents such organic fever-poisons could be destroyed. He would fain believe such was the case. It might be true, as Dr. Hunter had said, that the epidermis of the hand might be so impregnated that so much poison might lurk in its deeper layers as to cause puerperal septicæmia even after a three-weeks' holiday on the part of the medical attendant. He did not, however, think that their present knowledge warranted this. Probably, if the cases were examined, some hidden relationship between them and other causes might be traced different from what Dr. Hunter had shown. Then they knew that carbolic acid caused desquamation of the cuticle; and most of them would demur to the case of pyæmia where the pulmonary mucus membrane was supposed to be the absorbing medium. It was more probably a scratch in some accessible part. These were the doubts that occurred to him; and if it were true that these poisonous influences—bacteria, etc.,—were so subtle that no carbolic acid could kill them, then no obstetrician nor surgeon could, after a sinking wound, go to cases for weeks. —*Ext. from Monthly Abstract of Medical Science.*

#### WARKER'S IMPROVED SYPHON.

MR. THOMAS WARKER, of New York city, has devised an apparatus for the administration of sparkling wines, which promises to be of the greatest utility to physicians. It is well known, whenever wines charged with carbonic acid gas are prescribed for our patients, that after the bottle containing it has been opened and the first dose is taken, that most, if not all of the sparkle disappears, and, as far as any good to be obtained from the gas itself is concerned, it is virtually inert. The French contrivance of introducing a faucet with stop-cock through the cork, although apparently sound in theory, was found radically defective in practice. The wine was discharged with a spurt, and with considerable force, but contained little or no gas after the first glass was drawn. Mr. Warker, after a careful study of this phenomena, discovered that the object aimed at in this and all other similar contrivances—namely, the discharge of the wine under pressure—was the real cause of the loss of the gas in the glass. This

theory, it seems to us, is abundantly substantiated by the ordinary method of obtaining the wine from the bottles. The operation of removing the cork is the signal for the discharge of the extra and supernatant pressure; the wine is then simply poured in the glass, and, if not allowed to stand too long, retains its accustomed sparkle. If, however, the entire contents of the bottle are not used within a reasonable time after being opened, we have also a loss of the carbonic acid which it contains. In this instance the gas escapes from the liquid because there is not sufficient pressure above to prevent it.

It is necessary to appreciate these facts in order to understand the principles upon which his contrivance is based. His objects are, first, to maintain the pressure in the bottle, or the ordinary syphon, as the case may be; and secondly, to discharge given quantities without subjecting them at the moment of their discharge to any pressure whatever.



The apparatus, as seen in the cut, consists of a bottle of champagne, the cork of which is perforated for the reception of a tube connected with an extra or receiving chamber. When a small quantity of wine is to be drawn, a direct communication is opened between the chamber and the bottle by means of a valve, and, when a sufficient quantity of wine has escaped in the small receptacle, the valve is closed. The bottle and the extra chamber are then entirely independent of each other, and the pressure in each is relatively the same, and can be so maintained as long as desired. When the wine in the chamber is required, the opening of a compound valve relieves the pressure of the supernatant gas, and the wine thus relieved gently flows into the glass, containing even more gas than when poured from a freshly-opened bottle. As can easily be seen, this operation can be repeated with the same result until the bottle itself is exhausted. The practical application of this principle enables the physician to prescribe sparkling wines not only from syphons, but from the original bottles, and still preserve the sparkle until the entire contents are used. Aside from this, means are now afforded, by attaching this supplementary chamber to the nozzle of the ordinary syphon apparatus, of charging still wines, brandies, and even noxious draughts with gas, and administering them to our patients ad libitum. The



question which naturally suggests itself in this connection is, why champagne and similar wines cannot be treated as the ordinary mineral waters, which are known to retain a certain amount of gas when discharged under pressure. The answer to this is, that Mr. Warker has found that, while mineral waters will so behave, the wines are governed by a different law, and hence the opposite result. Another advantage of this contrivance is the possibility which it affords of administering the different mineral waters charged with gas, and at different temperatures. Carlsbad, for instance, can be drunk at its natural elevated temperature, without suffering from the loss of its carbonic acid, which would be the case under other circumstances. Altogether, the scientific principle involved in this contrivance is as interesting to the physician as its practical application is destined to be beneficial to his patients.—*N. Y. Medical Record*, December 2, 1876.

#### LISTER'S ANTISEPTIC METHOD IN OVARIOTOMY.

By J. MARION SIMS, M.D., New York.

PROFESSOR LISTER's late visit to this country seems to have given a new impulse to antiseptic surgery. Van Buren has adopted it with success, and is lecturing on it to his class at Bellevue with great enthusiasm. Stephen Smith has also adopted it with the same success, and is teaching it most earnestly to his class at the University, and other surgeons must take it up. I have often wondered why it had not been used in ovariectomy. Lister told me it had not been done in Great Britain. He advocated it strongly, but Spencer Wells and Keith have had such wonderful success in their operations, that they did not feel justified in trying any new method.

I would have used it long ago if I could have found a convenient and ample spray-producer.

A fortnight ago I heard that Dr. Sass had perfected an apparatus, and had tested it in operations by Van Buren, Stephen Smith, and others. I saw Dr. Sass, and he kindly consented to bring his apparatus, and apply the carbolic spray for me in a case of ovariectomy.

The patient, forty-seven years of age, noticed a tumor, the size of an orange, in the right iliac region last April. She consulted her family physician who pronounced it an ovarian tumor. In June she consulted Dr. Thomas, who wisely told her the time had not arrived for an operation. On the 20th July she went to Philadelphia to see Dr. Atlee, who gave her the same good advice. I saw her on the 20th September. I have never seen any one so anxious for an operation. I dissuaded her from it, advising her to return home and wait at least till next spring. I told her the tumor did not weigh more than ten pounds, and that an operation was not justifiable till she vomited her food and began to emaciate. I saw her a month later. She declared she had not the strength to make the journey home, and that she threw up every time she took food. I still refused to operate. She wrote to Dr. Atlee, and he replied on the 6th November: "I can scarcely think a tumor

so small can affect your general health so seriously. But if your emaciation and debility are the result of the presence of the tumor, then by all means it should be removed." I believe her vomiting and consequent emaciation were mainly the result of mental and moral causes. Whatever the cause, her declining strength and a recent fugitive attack of peritonitis warned me not to procrastinate the operation any longer.

The operation was done on Thursday, the 23rd November last. I am particular in fixing the date because I believe it inaugurates a new departure in ovariectomy.

Dr. Sass directed the spray which covered the seat of operation with a delicate carbolic mist. The hands, sponges, and instruments were all dipped in carbolic water. The operation and dressing lasted forty minutes, the spray being kept up all the time. It could have been continued two hours, if necessary. There were no adhesions. The peritoneal cavity contained six or eight ounces of a reddish serum. The peritoneal membrane was everywhere deeply congested. This fact explains the presence of reddish serum, and the previous attack of peritonitis.

The pedicle was very short, and at least three inches broad. It was tied in three sections with strong twine, and drawn out and fixed in the lower angle of the wound, clamp-fashion.

The external incision was closed by sutures, and a carbolized dressing applied.

The pulse never rose above 90, nor the temperature 101.

Convalescence was fully assured in forty-eight hours, and the patient is now quite well. The tumor was polycystic on right side, and weighed fifteen pounds.

I hasten to lay this case before the profession merely to urge the adoption of Lister's antiseptic method in ovariectomy, which, I am sure, will prove as valuable in this operation as it has in general surgery.

Dr. Sass's apparatus answered its purpose admirably, and I think he has rendered us a great service in bringing it before the profession at this time.—*N. Y. Medical Record*, Dec. 9th.

#### SIGNS OF THE FIRST STAGE OF PHTHISIS.

It is so all-important to recognize phthisis at its inception that we quote the following summary from a lecture in the *Lancet*, by Dr. Jas. Edward Pollock:—

The *first stage*, which consists in a filling up of the alveoli by inflammatory or tubercular products, is recognizable by the signs which indicate altered physical conditions of a portion of the lung. In health we hear the gentle vesicular murmur caused by the entering air, followed by an equally gentle expiration-sound as the air is expelled, and the percussion-note is even on both sides. The voice scarcely resounds through the elastic air-tubes, but communicates a gentle purr or fremitus to the hand when applied to the chest-walls. But if a portion

of lung be solidified surrounding a pervious air-tube all this is altered. There is a dull note on percussion, because less air is under the finger. The entering air-sound may be *feeble, harsh, or jerky* and interrupted; the expiration-sound is prolonged unduly; while the voice-sounds are propagated to the ear as through a tube, and the heart's sounds are also conducted. Now these are common to the first stage of phthisis, but why? All that auscultation can tell you is that a portion of the lung has several of its physical conditions altered, but of the nature of the product which so alters them it can tell you nothing. That knowledge can only come to you by a study of the other relations of your case. Let us try these alterations by their meaning.

*Feeble respiration* may be due to obstruction in one or more bronchioles, by pressure on their walls or narrowing of their calibre; by any obstacle to air entering, as a tumor or a foreign body in the bronchus; by anything which increases the distance of the lung from the ear, as effusion into the pleura or by a thickened pleura; and by emphysema, which impairs the elasticity of the lung.

*Harsh breath-sounds* may be due to thickening of the walls of the air-cells, whereby their elasticity is impaired, by induration causing pressure on the alveoli, and by dryness of the mucous membrane of the bronchi.

*Prolonged expiration* depends on a difference in the density and an alteration in the elasticity of the lung, whereby a sound naturally feeble is developed and rendered more audible.

The *bronchial or tubular* character of the breath-sounds and voice is caused by the increased conducting power of the solidified lung, and excessive audibility of the heart-sounds means the same.

The *wavy or interrupted* inspiration sound is only valuable when permanent and conjoined with other sounds which indicate solidification, as a whiffy or tubular character of breathing. It is probably caused by alterations in the elasticity of the alveoli and their irregular expansion.

Now if you can group several of these signs in any one case, and if dullness co-exist, and the space presenting these phenomena be limited in extent and one-sided, you may be sure that some solidifying alteration has taken place in and around the alveoli of that part of the lung. But if this condition be preceded by slight loss of flesh, sub-febrile symptoms, and with dry cough or a scanty flocculent expectoration, you may be pretty sure that you are dealing with the early stage of phthisis. But you only know your patient's present state: the future is masked or may be altered by various other agents than those now evident to you. Physical evidence is always true, but the inferences may not always be correct. I have pointed out to you that even from this state of things there may be recovery; the alveoli may collapse, the chest-walls fall in, the morbid product in the lung undergo degenerative change, dry up, and be expectorated, and a little flattening and dullness alone betray the nature of the attack.

## UROCYSTIC AND URETHRAL DISEASES OF WOMEN.

By ALEX. J. C. SKENE, M.D., Professor of Gynæcology in the Long Island College Hospital, Brooklyn, N. Y.

**GENTLEMEN:**—Progress in the study of pathology enables us to understand more fully the various changes of structure which give rise to deranged action on the part of the various organs of the body, and therefore we have more *organic* diseases on our present list, and fewer *functional* disorders.

The rule has been to call any trouble a functional disease when we could discover no change of structure in the case. On the other hand, improved means of investigation now enable us to ascertain more positively that in certain deranged functions, the organs involved are normal in structure. This is particularly applicable to the derangements of the bladder in the female.

There are several functional disorders of the bladder due to diseases outside of the organ itself, and in order that you may easily follow me in what I have to say about these derangements, let me enumerate the various ways in which the function of the bladder may be disturbed.

1. Frequent urination.
2. Difficult urination and retention.
3. Painful urination.
4. Pain after urination.
5. Incontinence of urine.

The majority of these deranged actions on the part of the bladder may be due either to functional or organic disease. Those purely functional I shall now tell you about.

In the variety of conditions of the nervous system grouped under the head of "hysteria," we often observe that frequent urination is a prominent symptom. The cause, in many cases, is the peculiar character of the urine secreted in this disturbed condition of the nervous system. The limpid urine of hysterical patients is deficient in solids, the watery portion being greatly in excess. This unnatural composition renders the urine irritating to the bladder, so that it cannot be long retained. The quantity of urine secreted is also excessive, which, together with the irritating quality of the fluid, renders urination necessarily very frequent.

But apart from the frequent urination which occurs, for the preceding reasons, in severe attacks of hysteria, we often see cases of frequent evacuation which can only be accounted for by the state of the nerves which govern the action of the bladder. When the quantity and composition of the urine are normal, and the patient can retain it without pain or distress during the night, but has to pass it every hour or two during the day, we may safely conclude that the trouble is purely functional, and due to a

disordered state of the nervous system. The only condition which resembles this history is occasionally seen in prolapsus, the patient being free from trouble while reclining, but has to urinate frequently when in the erect position.

Another class of cases resembling the hysterical patients in the frequency of urinating, but differing in every other respect, we find in those who suffer in consequence of the habit of masturbation. The constant congestion and irritability of the pelvic organs, caused and kept up by the unnatural and excessive exercise of this sexual function, give rise to frequent urination. Such patients complain of general weakness, which is not accounted for by any organic disease of the general system. Nor is there disease of the bladder; it is simply enfeebled and irritable like the rest of the pelvic organs. To make a correct and positive diagnosis in such cases is by no means easy, because it necessitates our detecting the habit of masturbation, and this is usually one of the most difficult tasks for the diagnostician. It is not always prudent to question the patient regarding the habit; and even when we do, they frequently fail to comprehend the question, or they answer falsely in the negative. We are thus generally left to guess at the truth of the matter.

The symptoms developed by masturbation are depression of the nervous system, manifested by lassitude, sadness, or emotional manifestation of joy and sorrow—easily affected to smiles or tears. The eyes are dreamy and heavy, and the pupils dilated. Such subjects are excitable, irritable, and easily exhausted. They often have headaches. Nutrition is apparently good in some cases, as shown by the fair supply of flesh; still they often suffer from acute indigestion, although at times the appetite is remarkably good. The bowels are usually constipated, and the muscles are soft and flabby. The exhalations from the skin are changed in some cases, so that a peculiar odor is noticeable about such persons. This odor cannot be described, but when once experienced can be easily remembered.

In all this class of functional derangement of the bladder from neurotic causes, the symptoms vary in severity to a great extent in the same individual. The trouble is by no means regular and constant in its manifestations as in organic diseases. Whatever disturbs the nervous system will increase the disorder. The rule is, that frequent urination is the prominent trouble, but occasionally painful micturition is complained of. It is then simply a slight scalding pain experienced when the urine is passing over the irritable or chafed mucous membrane about the meatus urinarius.

Hysterical patients frequently suffer from retention of urine. Some of them complain for a time of difficulty in emptying the bladder, and finally fail to do so altogether. At other times

they all at once find that they cannot urinate. There are conflicting views regarding the cause of this retention, some believing that such patients can't urinate, and others that they won't. Those who believe that the trouble is feigned, not real, do so on the ground that in this morbid state of the nervous system they enjoy catheterization, which would be distressing to any one of healthy mind and body. Others claim that in the extreme sexual excitement which occurs in some cases of hysteria, the chronic erection of the clitoris makes pressure upon the urethra, and prevents the flow of the urine through the then compressed urethra. I am satisfied that both kinds of cases occur. There are those who complain of retention when they know that the doctor will use the catheter, but they can urinate easily when they please. Others I have seen who were suffering from excessive and painful distention of the bladder, and would have gladly relieved themselves if they could. Retention of the urine from this cause occurs in the amorous, who either do not practice masturbation, or who have broken off the habit.

The function of the bladder is frequently deranged from diseases of the general system, and by affections of the other organs of the pelvis. In many of the acute diseases, where the urine is loaded with solid constituents, urination is often painful. This symptom is usually accounted for by the fact that it occurs during the constitutional disease, and passes off, as a rule, in a short time.

The effect of malarial poison on the bladder and urethra is very peculiar, and requires a notice in this connection. The trouble produced in this way has been called urethral fever, and is described as an inflammation of the mucous membrane of the urethra. It might more properly be called malarial fever of the urethra. As I have observed this affection, the bladder and urethra are usually both affected, but I do not consider the disease one of a well-defined inflammatory character. There are usually symptoms of malaria present, but not necessarily chill and fever. On the contrary, I believe that I have observed the trouble more frequently in remittent than in intermittent fever, and very often where the constitutional symptoms were not more than a slight derangement of the digestive organs with moderate elevation of temperature in the after part of the day.

The symptoms vary, but usually are as follows: The patient complains of frequent desire to urinate, and some vesical tenesmus; severe burning pain on passing water, with stinging and burning in the urethra after urination. The history of such cases resembles acute gonorrhœal urethritis so far as the abruptness of the attack and the tenderness and pain of the urethra are concerned, but there is usually

no discharge, or at least very little. Under the proper treatment the disease disappears as promptly as it comes on. In many cases the suffering is greatest in the afternoon and early part of the night. The treatment is simple, and usually very satisfactory. Quinine\* in full doses for one day, followed with small doses before meals for a week, will cut short the trouble, and prevent its return. The digestive organs require attention when they are out of order, as they generally are.

Functional disorders of the bladder, caused by diseases of the other pelvic organs, are frequently met in practice. In this class the bladder trouble is secondary to some primary and more important affection, but the derangement of its function is often the most troublesome and most prominent symptom, hence it is important to understand its relations to the primary disease in order to make a correct diagnosis. This class of functional disorders frequently resemble in history some of the organic diseases of the bladder, so that care is necessary in order to distinguish the one from the other. What I may say on the subject will have reference to diagnosis only. When we know that the trouble of the bladder is due to disease of some other organ, attention is at once turned to the primary trouble; but we must keep in mind these facts when we are investigating the derangements of the bladder.

Diseases of the rectum often affect the bladder sympathetically. Irritation and pain of the rectum, from any cause, affects the bladder less or more. Chronic hemorrhoids will cause frequent urination, and so will rectal fissures, especially after defecation. Abscesses in the neighborhood of the rectum will frequently cause retention of the urine. Very troublesome irritation of the bladder comes from ascarides. The itching of the anus and rectum caused by these troublesome little worms keeps up an almost constant desire to urinate. Children are the most troubled with these parasites, but women often suffer in the same way.

Acute pelvic peritonitis and cellulitis cause great distress in many cases by their effects on the bladder. A constant desire to urinate, without the ability to make straining efforts to accomplish the object, are very often observed in all these acute pelvic inflammations. The disturbance of the bladder is of course only a symptom of the more important and primary trouble, and requires only to be mentioned here. The after effects of pelvic peritonitis on the bladder is what I especially desire to call attention to at present.

The adhesions formed by the products of the inflammation of the pelvic peritoneum are in some cases sufficient to prevent the distention of the bladder and frequent urination is then a

necessity. This derangement of function generally exists alone. The urine is retained without trouble up to a certain amount; it is passed without pain, and no vesical tenesmus follows evacuation. Unless the contraction of the bladder is extensive and the frequent necessity to urinate very troublesome, patients rarely consult us for the trouble.

Resembling this form of deranged function of the bladder are the troubles which come from displacement of the uterus. In all dislocations of the uterus the bladder suffers less or more. In prolapsus the bladder is drawn down, and cannot expand with the same facility, or else the extra traction on the utero-vesical ligaments produced by the prolapsus increases the irritability of the bladder. Whatever the explanation may be, the fact is that in prolapsus uteri the subject cannot retain the urine for the usual length of time.

Frequent urination from this cause is as marked in prolapsus in the first degree as in more advanced stages of the trouble. When the displacement has existed for a considerable time, the bladder accommodates itself to the new relation of things, and the calls to urine become less frequent.

In complete prolapsus of the uterus and bladder, we find, in place of frequent urination, difficult urination and in rare cases retention. I presume that in such cases the bladder is never completely emptied. The little urine which remains decomposes and in time causes cystitis, which greatly increases the suffering of the patient. Such cases are very much like the cystitis which in old men comes from partial retention of the urine caused by enlargement of the prostate gland.

Anteversion usually causes frequent urination in a more marked degree than prolapsus. In this displacement the uterus is generally enlarged and elevated, so that the body and fundus rest upon the bladder and impede its distention.

Retroversion affects the bladder the same as prolapsus, except when the uterus is very much enlarged and is thrown backward and impacted in the pelvis, so that the cervix presses firmly on the urethra. In such cases urination is impossible. Examples of this are seen in retroversion occurring in the early months of pregnancy or after confinement.

Functional derangement of the bladder, arising from the various forms of displacement of the uterus, is characterized by one peculiarity, and that is, that the trouble is aggravated by the patient standing or walking, and relieved by lying down. You can usually tell that the frequent urination is caused by displacement when the position of the patient so affects the symptoms. The exceptions to this rule are very rare, but one of these I related in my previous lecture.

\* Brichéleau, *Archives General de Médecine*, was the first to give quinine in urethral fever.



I have observed that patients with antelexion often suffer from frequent urination, but I have not been able at all times to say whether the trouble was due to the fundus uteri resting on the bladder or to the supersensitiveness of the whole pelvic organs. I have inclined to believe that the latter was usually the cause.

Having thus briefly disposed of some of the more important functional disturbances of the bladder, I now turn your attention to diseases of the urethra.

Acute urethritis, though not a very frequent disease among women, is a very distressing one to the patient, and often difficult to relieve. In many cases you will find the pathology specific, *i. e.*, due to gonorrhœa; and I would treat this subject as gonorrhœa in women, were it not that it is often difficult to tell a specific or venereal urethritis from simple inflammation of that portion of mucous membrane. There is a difference in history when we can get correct testimony from the patient. Simple urethritis usually comes on gradually, and is preceded by symptoms of uterine or vesical disease; while gonorrhœa comes on rather abruptly, and is preceded or attended by acute vaginitis and vulvitis. The chief symptom is painful urination. Sharp scalding is produced by the urine passing over the tender surface. There is often a frequent desire to urinate, but not so urgent as in cystitis. In some cases the urine is retained for a long time, evidently from a dread of the pain caused in passing it.

An examination of the parts will show signs of inflammation about the meatus, with or without the same condition of the vulva. Occasionally there is a discharge seen coming from the urethra, but if the parts have been recently bathed this may not be apparent. Introducing the finger into the vagina and pressing upon the urethra from above downwards, the discharge can be started unless the patient has passed water immediately before. The appearance of the discharge resembles that of gonorrhœa in its various stages.

The treatment of acute urethritis, whether specific or not, may be conducted on the same principles as in gonorrhœa in the male, using the same constitutional remedies—local baths, etc. This will suffice in most cases of acute disease; but when it assumes the subacute form or is chronic from the beginning, then the use of injections becomes necessary. Solutions of nitrate of silver, sulphate of zinc and the like, will answer. You must bear in mind that the female urethra will not hold more than ten or fifteen drops, and if more is used it will enter the bladder, even where very slight force is used while injecting. I use a large syringe, placing the nozzle over—not into—the meatus, and inject slowly and without force a small quantity. When the case is of long standing, and the neck of the bladder appears to be in-

volved also, I use a mild injection of one or two grains of nitrate of silver to the ounce, and inject it through the urethra with force enough to enter the bladder, and let it remain there, to be passed off when the patient urinates. In old cases which began by a severe acute attack, and where the walls of the urethra are very much thickened and the canal contracted, dilation with bougies does much good. While the bougie is passed once or twice a week, I apply to the vaginal portion of the urethra oleate of mercury or the unguentum hydrargyri. This will often suffice to stop the gleet discharge, as well as remove the thickening of the urethra walls.

Another very troublesome affection of the urethra which results from urethritis, or may appear without any previous disease, is granular erosion, as it is called. The mucous membrane is covered with young, imperfectly developed epithelium; the papillæ are hypertrophied and extremely sensitive. This gives rise to the most excruciating pain during micturition, and generally keeps up a distressing tenesmus. This disease is fortunately not very common. Old people are most liable to suffer from it. The diagnosis is made from the history and appearance of the urethra. The treatment which is most reliable is, cauterization of the whole surface. The milder washes and injections do not accomplish much. Pure carbolic acid may be tried first, brushing it over the surface, and repeating it in eight or ten days. This is the least painful application, and answers in some cases. When it fails, solid nitrate of silver should be used; and when that does not suffice nitric acid or the actual cautery may be employed. Better, perhaps, than these strong caustics, is to dilate the urethra so as to paralyze the muscles, and then touch it with carbolic acid.

Vascular tumor, caruncle, or wart of the meatus urinarius, is an affection which will come under your notice quite as often as any of the urethral diseases. These growths are located in the meatus, and generally on the lower side. They have the bright red and fungous appearance of mucous polypi, such as you may have seen in the nose, ear or cervix uteri. Sometimes they are pedunculated, but more frequently sessile. They are very tender to the touch, causing the patient much distress when anything comes in contact with the diseased part. The chief trouble is the pain which they cause during micturition. They are easily diagnosticated, as a rule. The bright red color of the tumor or tumors—for there are often more than one—contrasted with the normal membrane around, makes detection easy.

The only thing likely to be confounded with them is prolapsus of the mucous membrane of the urethra. This rather rare affection can be distinguished from caruncle by the tumor extending uniformly all round the meatus, and



presenting the usual appearance of a mucous membrane in a state of congestion and oedema. It can also, in some cases, be reduced when the patient is lying on the back.

The treatment of caruncle is to thoroughly remove the abnormal part. When they are pedunculated they can be clipped off, and the base touched with caustic to stop the bleeding and prevent regrowth. When they are sessile they should be destroyed by nitrate of silver, nitric acid, or chromic acid. To be able to apply the caustic to the abnormal part, and save the normal portion of the urethra, I have used a No. 10 or 11 gum catheter, having one side cut away. This I introduce into the urethra so as to bring the tumor into the notch of the catheter, and the caustic is then applied. Better still is the instrument recently described in the *Obstetrical Journal of Great Britain*, by Mr. Thomas Bryant. It is something like an ear speculum cut away on one side, and answers as a "dilator, speculum, and protector." It is an improvement on the ordinary female urethral speculum.

I have already mentioned prolapse of the mucous membrane, and I need only say here that it is a rare affection, occurring in broken-down constitutions, where there has been pre-existing bladder or urethral disease. I base this statement on one case which came under my own observation. The appearance is that of a uniform, round, red tumor at the meatus, with the opening into the urethra in the centre of it. If possible it should be returned by pushing it back, and then using astringent washes to endeavor to keep it in position; but this, I learn, usually fails, and then removal of the prolapsed portion is necessary. The quickest and best way is to take it off by the galvano-cautery. When this is not at hand the actual cautery may be employed. The most prominent portions should be touched, which will cause sloughing; and the contraction which occurs during healing will dispose of the superabundant tissue.

I ought to mention polypus of the urethra, which is one of the rare troubles, and may be classed with vascular tumor and prolapsus. No difficulty will be experienced in the diagnosis and treatment of this disease when the tumor is situated at or near the meatus urinarius. When it is situated high up, it may escape notice in the ordinary examinations. When the symptoms point to the presence of such tumor, a small speculum should be used, or the instrument of Bryant already spoken of. When the polypus is detected it should be removed. To do this, however, it is necessary, as a rule, to dilate the urethra. This can be easily and safely done by using sounds or the improved Barnes' dilators.

Recently dilatation of the urethra has been practiced very extensively. Dr. Noeggerath, of New York, has not only employed dilatation as a means of examining the urethra and bladder, but also for the purpose of admitting the finger

to explore, by the touch, all the organs of the pelvis. He was not the first to dilate the female urethra—that had been done long ago—but he was the first, I think, who dilated it for the purpose of examining the pelvic organs. In the space of a few hours he has dilated the urethra sufficiently to admit the finger, and no very serious trouble followed, which is contrary to what we might have expected. This dilatation of the urethra for the purpose of examination, and also as a means of curing many of the urethral and bladder diseases, is one of the most important improvements in the management of this class of surgical affections. It is to the urinary organs what stretching the sphincter ani is to the surgery of the rectum.

I have only time to briefly notice urethrocele, and refer you to Dr. Bozeman's article on that subject in the *American Journal of Obstetrics* for February, 1871. In this paper you will find a more extended account of the subject than I can possibly give. The pathology given by Dr. Bozeman is as follows: First the lower portion of the urethra becomes constricted by infiltration of the tissues outside of the urethral mucous membrane. This causes dilatation of the urethra higher up; and at the same time the muscular coats increase in size. The result is, that the central portion of the urethra being distended, settles down, so that in time the urethra, in place of being a straight canal, becomes triangular, the upper portion being the base, and the central and lower portion (that is, midway between the neck of the bladder and the meatus) the apex. At this dependent portion a few drops of urine accumulate, which also increases the distention, and by its decomposition causes inflammation and ulceration. The urethrocele projects down into the introitus vulvæ, in the shape of a tumor, which may be mistaken for cystocele. In time the inflammatory affection of the urethra involves the bladder.

Among the causes mentioned are injuries during labor, over-exertion, excessive coition, congestion, and inflammation of the mucous membrane. The symptoms (after the disease which began the trouble has subsided) are first difficult, and finally painful and frequent urination. The diagnosis can be made from the history and the presence of a tumor in the introitus vulvæ, and the deflected condition of the urethra.

The treatment recommended by Dr. Bozeman is to tap the urethra at the most dependent portion. He proposes to make an opening through which the urine can pass, and leave it open until all inflammation has subsided—say one or many months—and then close it.

Regarding this disease I must say that I have not seen many cases of it, or, if I have, I failed to detect its true nature. One case I remember which corresponded to the history of urethrocele, and was, no doubt, a genuine speci-

men; but I recollect she got well under treatment, which consisted in dilatating the urethra with sounds, and washing it out frequently with a solution of nitrate of silver.

Finally, I will mention fistula of the urethra—not the ordinary opening which comes from injury and is described in text-books along with vesico-vaginal fistula, but blind internal fistula. The history of a case will perhaps answer better than a description. A lady had what appeared to be a cyst in the urethro-vaginal wall. Inflammatory action set in; and the pressure of the knife, used to open it in the vagina, caused an opening into the urethra at the same time. The wound in the vagina healed, but the opening in the urethra remained, and pus and urine accumulated in the sac, and a pretty constant discharge from the urethra continued. In another case of specific urethritis, followed by considerable thickening of the urethral wall, a sac or pocket was formed, which filled with pus and urine, and supplied a discharge which was almost as constant as an acute urethritis.

The treatment in both cases consisted simply of dilatation of the lower portion of the urethra with sounds, and washing out the urethra and sac with borax and water. The patients were also directed to make pressure upon the upper portion of the urethra, after urinating, to force out any urine that might lodge in the fistula or sac. One case recovered, and, as the other did not return, it may have ended in recovery also. In case this method should fail, I think it would be good treatment to make an opening into the sac from the vagina, *i. e.*, make a complete urethro-vaginal fistula, and afterwards close it by the usual operation.—*Cincinnati Med. News.*

#### HOW TO EXAMINE THE UTERUS.

The following definite directions, given by Dr. Hanks in the *American Journal of Obstetrics*, will, we believe, not be deemed superfluous by a number of readers:—

1. For a thorough examination of the uterus, it is absolutely necessary to provide a good light. I have seen a uterine examination made in a chamber, by a learned physician, with no good resulting, because the room was dark. A Sims or Barnes could have done but little better under similar circumstances.

2. A hard table should be used if possible. If your patient objects to this, let her remain on the bed. The hard table is always preferable, however, and should be placed directly opposite the light. Let the patient lie on the back, head resting on a low pillow, thighs drawn up, legs flexed on thighs, feet resting on the table or bed.

3. If the patient is a young girl, or a nervous unmarried woman, it is best to administer ether.

4. Now proceed at once with the physical examination of the abdomen with the right or left hand, whichever is the best educated, or both.

5. If not satisfied, with the eye also.

6. Next question, with the best educated finger, the condition of the vulva and perineum.

7. Then the vagina. Examine its size, shape, heat, and moisture. Then, passing upward until the finger touches the cervix uteri, consider its position, size, shape, density, and mobility. Passing around the cervix uteri, try and ascertain the position of the body of the uterus; if it is movable, and to what extent.

8. If you are not able to determine, bring to bear another aid, by using the other hand on the abdomen at the same time—the bi-manual method. You may now be able to grasp the uterus, if the patient is a thin woman. If she is stout, you may resort to the uterine sound. If you are an expert, *before* introducing the speculum, otherwise not until afterward. The sound should indicate the position of the uterus, and its shape and size. If the sound is passed with great difficulty, and causes great pain, a stricture or flexion undoubtedly exists.

9. If you are not an expert, you must not be sure of either of these conditions until you have used the speculum. This, if a glass Fergusson, will only reveal the condition of the mucous membrane of the vagina and cervix uteri, and the size and position of the external os. Some form of the short-bladed bivalve specula will serve best, if the patient is a lean woman; if she be stout, a long-bladed speculum will be necessary. If you place the patient on the side, in the Sims' position, you can use his speculum, if you have an assistant; or Thomas' improved speculum, if an assistant is not at hand. Whichever speculum is used, observe this rule in its introduction: *Know positively the exact location of the cervix uteri before attempting to introduce the speculum.* The uterine sound ought now to pass up readily. If an ante flexion is suspected, press the fundus backward with the depressor, or a loop of wire; if a retro flexion, press it upward and forward with the same means.

10. If still uncertain of the conditions, in examination per rectum will be necessary. The finger will detect any disease of that organ, which so often simulates uterine complications. In this way you can judge if a retroversion exists, and of the degree of fixation, and of the irregularity of the posterior wall of the cervix and body of the uterus.

11. Another method remains, if this prove unsatisfactory, that of passing the sound through the urethra; or by dilating it, and using the finger.

#### REMEDY FOR DANDRUFF.

Don Roy, M.D., in the *Medical Brief* gives the following: R. Chloral hydrat., 10 grains; tr. canthar., 20 drops; glycerinae, 1 ounce; aquae, 3 ounces. Mix. Rub from one half to one ounce into the scalp by means of a sponge, and repeat it every morning. A slight burning sensation and reddening of the scalp occurs, disappearing after two minutes. If the hair had fallen off in consequence of the dandruff, it will be renewed in about a month.

# POPLITEAL ANEURISM CURED IN TWO HOURS BY THE APPLICATION OF ESMARCH'S BANDAGE.

D. M'H., laborer, æt. 29, was admitted into Manchester Royal Infirmary under the care of Mr. F. A. Heath, Oct. 16. He stated that up to within three weeks of his admission he enjoyed good health. While at his work about that time he experienced a weakness and pain in the calf of his leg, and noticed a lump behind the knee, which throbbed a good deal, and gave him some pain. He had never had syphilis but had been a pretty heavy drinker at times. On admission an aneurism, the size of a small orange, was found occupying the left popliteal space. It pulsated freely, and a distinct bruit could be heard in it. The tibial arteries at the left ankle could not be felt, but were plainly perceptible at the right ankle. The veins on the surface of the left leg were larger than those on the right but there was no œdema of the limb. Heart-sounds perfectly healthy, and area of cardiac dullness normal.

Oct. 17. At 10.15 A. M., after the limb had been elevated to empty it of blood, Esmarch's elastic bandage was carefully applied from the toes upwards, until lower part of the popliteal space was reached. The patient was then directed to stand up in order to allow blood to flow into the aneurism, and the bandage was then lightly passed over it, a layer of cotton-wool intervening. The roller was then applied above the knee to within three inches of Poupart's ligament, where it was secured. Temperature 98.6°; pulse 80. At 11 A.M. the patient was somewhat restless, and complained of great pain in the limb. One-third of a grain morphia given subcutaneously. At 11.15 A.M., temperature 98.6°; pulse 90; Signoroni's tourniquet applied to the femoral artery in Scarpa's triangle, and Esmarch's bandage, having been on exactly one hour, was slowly removed; tumour felt hard, and no pulsation could be perceived in it. The leg and toes looked blue, and felt cold. limb was enveloped in cotton-wool and flannel bandages to maintain the temperature. Pain was relieved on removal of Esmarch's bandage, and the patient appeared very cheerful. At 12.15 P.M. all pressure was taken off for a few moments, exactly two hours after the operation had been commenced. The tumour was quite hard, seemed a little smaller, and no trace of pulsation could be felt in it. A small vessel was noticed pulsating over the aneurism near to the external side; tourniquet re-applied. At 2.15 P.M. pressure was again removed for a short time; no pulsation in the tumour. At 4.14, just six hours after Esmarch's bandage was applied, the tourniquet was entirely removed, and the tumour on being examined was found to be quite hard, and free from pulsation. The patient was not in any pain. The tourniquet was applied lightly over the femoral artery, so as to control, but not to stop, the flow of blood.

18th. 9.30 A.M.: Tumour much smaller and quite hard; no trace of pulsation to be felt in it. Limb quite warm. Three small arteries to be felt pulsating in front and at inner side of knee-joint.

19th. Tourniquet entirely removed. Aneurism hard and getting smaller.

Mr. Heath was led to adopt this method of treatment from the account which appeared in *The Lancet* of the 30th Sept. of the success attending a case of Mr. Wagstaffe's, and his account was followed step by step during the operation. It may fairly be assumed that the aneurism was cured at the end of the second hour, for the tumour was quite hard and free from pulsation at the end of that time.—*Lancet*, Nov. 4, 1876.

## WARM WATER INJECTIONS IN THE TREATMENT OF UTERINE HEMORRHAGE.

Extracts from a lecture delivered before the Berliner Gesellschaft für Heilkunde, by Dr. Windelbrand, and published in the Deutsche Medicinische Wochenschrift, No. 24, 1876.

If I claim your attention to-day in the discussion of a plan of treatment which seems in direct contradiction to the generally accepted views of the correct course to be adopted by physicians, it will be to direct you to a careful consideration of a course heretofore almost unknown, but which will, in my humble opinion, produce a revolution in the treatment of uterine hemorrhages and the pathological processes producing them. My object will be to induce others to adopt my plan and thus bring into general use an important and valuable means of treatment.

In the first place I wish it distinctly understood that I do not claim any merit of originality, but that this belongs to Dr. Mann of Rhode Island, who made exclusive use of hot water injections in two cases of hemorrhage following abortions and succeeded in both cases in checking it. He claims that these injections not only effectually checked the bleeding but greatly diminished the severity of the pains. I will not enter into any further particulars, but will merely state that the idea struck me as so novel, and at the same time reasonable, that I resolved to resort to it at the first opportunity. This soon offered itself in the case of an abortion to which I was summoned after another physician had in vain applied the tampon, ice injections and compresses, ergot and acids internally, etc. The ovum could be barely reached through the open os; the lower segment of the uterus was very much relaxed and did not show the slightest disposition to contract; the patient was in a state bordering on collapse, and the most decided measures seemed necessary to be taken. I decided, before trying the tampon a second time, to employ the warm injections, which I did by means of an ordinary syringe with an uterine nozzle, the temperature of the water being 38°–39° R. (about 117° F.). Almost at the moment the stream of hot water entered the vagina the cervix began to contract; after 8 or 10 of these injections at intervals of 5–10 minutes, the ovum and its adnexa were forced into the vagina and were readily removed. The case then progressed without further trouble. Since this positive demonstration of the effect of heat on the contractility of the

uterus I have employed it in all subsequent cases of abortions, and indeed in all hemorrhages dependent upon relaxation of the uterus during delivery, whether premature or at term; also in case of inefficient pains and always with excellent results, as I have never yet seen the slightest ill effects follow their use. Very shortly after the first case in which I resorted to the warm injections I was summoned to a woman faint from repeated hemorrhages, with frequent pulse and cold extremities, and on examination found the os slightly dilated, through which could be felt the border of a placenta laterally attached, and the shoulder of the fetus. Even this examination caused profuse bleeding. I attempted to introduce my hand, dilate the os and turn, but was prevented by the rigidity of the neck. Besides, there were scarcely any pains. I now made several injections and had the satisfaction of seeing the uterus take on energetic contractions; after several of those a large amount of amniotic fluid was expelled and the head of the fetus presented. The bleeding had ceased and within a short time the head was delivered in the normal position.

I have likewise stopped the hemorrhage in two other cases of placenta prævia at seven months, and with recurrence to the same plan when necessary have conducted the women safely to full term. \*

\* \* \* I have seen the same result of the hot injections on the contractile fibres of the uterus even in cases in which a large portion of the organ was occupied by neoplastic growths, such as carcinomata, and a considerable part of the fibres are rendered useless. Even in such instances they often checked dangerous hemorrhages. \* \* \*

\* It is my custom to make the injections with the simple irrigator with my patient occupying the dorsal decubitus. In this way I get a continuous stream. I begin with a temperature of 38° and gradually increase it according to the severity of the case up to 41° R. This can be very readily done as the sensitiveness of the sexual organs is very quickly lessened by heat. \* \* \*

\* \* I do not attribute this action to any coagulating effect of the water or heat upon the blood, but to the irritability of the uterus, excited by the hot injections.

#### THE USE OF ERGOT IN THE TREATMENT OF PURPURA

(*The Practitioner*, NOVEMBER, 1876).

—Dr. L. Duncan Bulkley calls attention to the treatment of purpura by ergot, in an interesting paper, the principal points of which are as follows:

1. The treatment of purpura as advised in books is ineffective and tedious in lighter cases, and insufficient to save life in many of the severe or hemorrhagic cases.

2. Ergot possesses a very decided power in contracting the involuntary muscular fibre, causes divided arteries to contract, acts upon the smaller arteries and capillaries, and has been proved a valuable arrester of hemorrhage in many affections.

3. In purpura the action of ergot is very manifest, causing, when given in sufficient doses, an almost, if not quite, immediate cessation of the cutaneous and other hemorrhages.

4. The most effective method of administration of ergot is by hypodermic injection, and this means renders it peculiarly valuable in purpura hæmorrhagica where there is hæmatemesis, so that its administration by the mouth would be impossible, or in cases where the stomach would not tolerate it.

5. While ergotin, a purified, watery extract, has been advised by many, and has been found to act efficiently in many cases, its action is liable to be uncertain by reason of age or faulty preparation, and after dilution with water it soon becomes inert.

6. Fluid extract of ergot may be administered hypodermically, undiluted, and without local accident, as abscess or inflammation, if care be exercised; and its effect is very prompt and certain.

7. Ergot may be thrown under the skin in any part of the body; the gluteal and shoulder muscles answer well, but the places to be preferred are about the pectoral muscles or at the sides of the chest, about half-way down.

8. Severe cases of purpura require the frequent repetition even of very large doses, whether by the mouth or by hypodermic injection; both methods may be combined.

9. Generally one or two grains of ergotin or from ten to fifteen minims of the fluid extract hypodermically, once or twice a day, are sufficient, but the former may be safely increased to five grains and the latter to twenty or thirty minims, and repeated as often as every hour and a half.

10. Larger doses relatively are required when given by the mouth, and their action, thus given, is more slow.

11. No fear need be entertained of any untoward effect, an ounce of fluid extract by the mouth, and seven grains of ergotin hypodermically, have failed to give rise to any unpleasant symptoms; and from half a drachm to a drachm and a half of the tincture or fluid extract have been continued for several months without producing ergotism.

12. Other preparations of ergot may be employed internally, as the powder, solid extract, wine, or infusion, the dose being proportioned to the effect required or produced.

#### TREATMENT OF DIABETES MELLITUS.

During the last few years Prof. Ebstein, of Göttingen, has treated a number of cases of diabetes mellitus with carbolic acid, with the result of causing a complete disappearance of the diabetic symptoms in a certain number of the cases, while others were entirely unaffected by the remedy. He accounts for this diversity in therapeutic results by a theory that diabetes is symptomatic of different pathological processes that call for different therapeutic measures. The close relationship between carbolic and salicylic acid then induced him to give the latter a trial. In the first case in which he tried it, it was given in small doses, only from five to eight grs. per

diem, and produced no effect at all, while twenty-five grs. of carbolic acid caused the disappearance of the diabetic symptoms in four days. The Professor, however, now publishes the histories of two cases in which carbolic acid and other therapeutic measures were utterly useless, one of which was cured and the other greatly benefited by salicylate of soda. In the first case, seventy-five grs. of salicylate of soda were given daily in three doses for eleven days. On one day one hundred and fifty grs. were given, but caused vertigo, noises in the head, and fainting fits. In the second case, one hundred and fifty grs. of salicylate of soda was given in four doses on the first day, but it caused so much humming in the ears, that the quantity was reduced on the next day to three doses of thirty-seven grs. daily. Nine days later the quantity was increased to forty-five grs. three times daily, and in fifteen days the urine was reduced to the normal quantity, and the sugar to one-third of the quantity passed before the remedy was used. The quantity of salicylate of soda was subsequently reduced to seventy-five grs. daily, and the patient is still under observation. In this case, restriction to a diabetic diet did not seem to aid the action of the drug, and in the first case the cure took place while the patient was allowed a mixed diet exclusive of potatoes.—*Berliner klin. Wochenschrift* June 12, 1876.

#### ERGOTIN IN UTERINE FIBROIDS.

Dr. Lombe Atthill, of the Rotunda Hospital, Dublin, writes to the *British Medical Journal*:—

I, in common with all those who practiced the hypodermic injection of ergotin, as recommended by Hildebrandt, have found that this treatment, sooner or later, resulted in the formation of troublesome sores. I think it of some importance to say that, though this is perfectly correct with reference to the cases published by me, and quoted by Dr. Byford in his essay, it is not so with respect to my more recent ones. I have availed myself, since my appointment to the Mastership of this hospital, of the larger opportunity offered me here to carry out this treatment more extensively, and I give the following cases as examples of the results obtained. Case 1, of large intramural fibroid, in a widow, nulliparous, aged thirty-eight; prominent symptoms, distress from weight and size of tumor, menstruation increased but not excessive, returning at intervals of twenty-one days; with an intra-menstrual discharge of blood, moderate in quantity, lasting for three days; thirty injections, practiced at intervals of two and three days. Result: total disappearance of the intra-menstrual discharge, slight prolongation of the intra-menstrual period, hardening and apparently slight diminution of the bulk of tumor, no pain caused by injection or irritation following it. Case 2. Single woman aged forty-five, rendered oxanguine by profuse menorrhagia, accompanied by excessive pain, and lasting fifteen days and upward, intra-

menstrual period of not more than from seven to ten days; of late, in fact, seldom free from a red discharge; large intramural fibroid filling up plevis, and reaching to within an inch of umbilicus. Upward of sixty injections of ergotin; admitted January 6th. Result: March 10th, flow diminished in quantity and lasting for six days, intra-menstrual period prolonged to twenty-one days; April 1st, menstruation reappeared this day, lasted but two days; May 21st, menstruated to-day, flow lasted four days. Marked as the improvement was as regards the check put on the loss of blood, her condition in other respects was not satisfactory; her sufferings, always great, were aggravated, the injection being always followed by severe pain, referred to the tumor, necessitating the constant use of morphia; she seldom could leave her bed; and I finally abandoned the treatment, and am now endeavoring to enucleate the tumor. I hope, at a future time, to publish the case *in extenso*. At present, I wish merely to point out the fact that the injection of ergotin, in either of the two cases I have detailed, was not followed by the formation of sores; nor has it been in several others in which it has been recently practiced for a shorter time by me. The only explanation I can give of the greater success in my later cases is this, that whereas I formerly added a small quantity of glycerine to the solution of ergotin, as recommended by Hildebrandt, I now employ a solution of one part of the extractum ergotæ liquidum (*British Pharmacopæia*) in two of water, injecting 15 or 20 minims of this each time. I always insert the needle into the gluteus muscle, making it penetrate to the depth of more than an inch.

#### PERNICIOUS ANÆMIA.

BY W. A. ROTHACKER.

Pernicious Anæmia was first described as a distinct disease by Biermer.

Biermer's cases, which were mostly women, showed, besides a high grade of anæmia, the following appearances:

In nearly all of the cases there were retinal hemorrhages; more rarely petechiæ and capillary hemorrhages were found in the brain and the meninges. The disease was, with the exception of one case, fatal. The post mortems revealed fatty degeneration of the heart and of the intima of the arteries and capillaries.

Quinke observed ten cases of this disease, *i. e.*, four men and five women between the ages of 25 and 59 years, and one girl aged 11. In all of these there was a waxy hue of the skin and mucous membranes, and puffiness of the face. In several of the cases there were marked dropsical manifestations. All of the patients were very weak and frail, so that they were obliged to remain in bed. The pulse was frequent, small and soft, and a loud anæmic murmur could be heard at the base of the heart, particular-



ly over the pulmonary artery. The heart was often found to be much dilated, and sometimes there was found fatty degenerations. The liver in several cases was very fatty. Some of the patients were troubled with repeated bleeding from the nose, others had petechiæ on the skin. Hemorrhages into the retina were constantly found without any existing disturbances of vision. The temperature was either normal, or it followed the line of a mild remittent fever; seldom running higher than  $102^{\circ} 2^{\circ}$ . The spleen, lymphatics and spinal cord presented no changes. The disease was slow in its development, but continuous in its progress. Its average duration was from one-third to one year, and death was the result of exhaustion, and seldom of any intercurrent affection. Quincke only observed two cases which recovered. In pregnant women the prognosis is absolutely unfavorable, as in all cases the patients died a few hours after a resulting abortion. In the early stages of the disease, patients very much resemble in general appearance those affected with Bright's disease in whom there is a beginning contraction of the kidneys. The albuminuria is only transient, and there is never hypertrophy of the left ventricle. Sometimes the patients, from their appearance, will bring to mind cases of ulcer or cancer of the stomach, or of typhus. The ophthalmoscopic appearances, i. e., retinal hemorrhages and sometimes the retinitis of Bright's disease, are pretty constant.

With regard to the etiology of the disease, it may be remarked, that a number of cases were observed in Switzerland; that many of the women were pregnant and that the majority of the patients were in poor circumstances. The total amount of blood in these patients was always diminished. The blood was light in color, thin in consistency, and flowed with difficulty. Microscopic examination revealed marked decrease in the red corpuscles, with considerable variation in their size, which latter condition was due to imperfect development of some of the corpuscles, and partial destruction of others. Repeated examination of the blood showed great destruction of the red and white corpuscles, with a defective reproduction of the same. This form of anæmia may follow the most various forms of disease. Its treatment is like that of ordinary anæmia. Transfusion has as yet brought no benefit.—*Quincke Wiener Med. Woch.*, No. 35.

#### TREATMENT OF CHRONIC ECZEMA.

In reply to a request on this subject, from a correspondent in the journal for July 15th, I think a few recent cases, illustrating the curative effect of carbolised oil in this painful disease, are well worth recording. I have used it in a great many cases with complete success. I may further add, that, although bathing in plain water frequently increases the irritation of the diseased parts, I have always found that bran-water (prepared by pouring boiling water on bran, and allowing it to cool) immediately relieves the smarting. Case 1.—H. B.,

aged 50, plasterer and moulder, a strong, healthy man, rather intemperate, suffered from eczema of the phalanges of both hands off and on for several years. He came under my notice in January, 1875, when his hands had been bad for seven months, and he was quite unable to work. Both hands were very irritable, covered with deep fissures, and weeping freely. I ordered him to bathe his hands twice a day in bran-water, and apply lotio plumbi constantly, and to take a saline mixture with five minims of liquor arsenicalis three times daily. In a few days, the irritation had all subsided, and he was then ordered to dress the fingers twice daily with lint soaked in carbolised oil (thirty minims of carbolic acid to one ounce of olive oil). This treatment was continued for six weeks, when he was dismissed cured. He came under my care in June, 1876, with a slight attack of eczema of the right leg, which speedily gave way to treatment; the hands had remained perfectly free from the complaint. Case 2.—J. S., aged 42, a baker and confectioner, very temperate man, always had good health, with the exception of an occasional attack of cracked fingers. He now suffered from severe eczema of all the phalanges of the left hand, which had been on him for several months. He was ordered to take three minims of liquor arsenicalis in half a wineglassful of water after each meal, to bathe the hands frequently in bran-water, and rub the fingers well with carbolised oil night and morning. He was completely cured in three weeks. Case 3.—Mrs. W., aged 36, at present under treatment, is the mother of several children, of temperate habits, rather inclined to corpulency, but otherwise enjoys good health. She has had eczema of all the phalanges of both hands for more than two months. The fingers are very red and swollen, with numerous fissures, which are extremely painful, and discharge watery fluid. She was ordered to bathe the hands frequently with bran-water, and then cover them with lint constantly moistened with lotio plumbi. The inflammation quickly subsided, and the usual carbolised oil was substituted for a lotion. She is taking internally a saline aperient mixture, and is rapidly getting well.

HARRY CROOKSHANK, M.R.C.S., etc.,

Lansdowne Crescent.

—*British Medical Journal*, Sept. 2, 1876.

#### ON THE DIAGNOSIS OF PROGRESSIVE PERNICIOUS ANÆMIA.

Professor Hermann Eichorst, M.D., of Jena says in the *Centralblatt für die Medicinischen Wissenschaften*:—

In No. 100 of the clinical essays in Volkman's collection, Professor Quincke, of Berne, treats of this disease. For more than two years I have busied myself with this disease, which is of very rare occurrence in North Germany.

The result of my investigations leads to the opinion that the collection of symptoms which



pass under the above name may be diagnosed with absolute certainty in its earlier stages. But clinical appearances do not furnish the material for a diagnosis; one must look for anatomical changes in the blood; in short, one may denote the affection as a disease of the blood-corpuscles, which is as easily recognized as leucæmia. The changes alluded to were not found missing in one of my seven cases, and I frequently demonstrated them to my colleagues.

While a portion of the red blood-corpuscles possess a normal size, and are only remarkable through paleness and a reduced disposition to the nummular arrangement in aggregations, one finds among them others which at once strike the eye by their smallness. Those latter often attain scarcely the fourth part of the diameter of a perfectly developed corpuscle; they are more deeply saturated with color; and when one rolls them beneath the cover glass it will be observed that on a profile view the biconcave appearance is more or less completely lost; their diminution in size even goes so far as to make many of them look like little globules of fat tinged with red.

Many hundred examinations of the blood were made in the cases of healthy individuals and in those laboring under manifold diseases, more particularly in anæmic and cachectic conditions but without the discovery of changes similar to those above described. If one has the opportunity to examine the blood in the earlier and the progressive stages of the disease, it will become evident that the worse the disease grows the greater will be the increase in number of the before-mentioned foreign elements; and I have collected the data in one case where the relatively intact blood-corpuscles, toward the end of life, were equal in quantity to those which were represented by the diminutive reddish drops. In all the observations the white corpuscles were found remarkably sparse; and very small collections of the well-known protoplasmic masses were found, which is very often the case in the blood of healthy individuals also.

I believe myself justified in regarding the described discovery as one enabling us to diagnose progressive pernicious anæmia.

#### THE TREATMENT OF RANULA.

The Paris correspondent of the *British Medical Journal* writes:—

Ranula is admitted by all surgeons to be a most troublesome, and in many cases, a most intractable affection. It is sometimes so little amenable to treatment, that some surgeons and among them the celebrated Dupuytren, contrived different means by which to keep open a fistulous orifice in the tumor, in order to empty the contents of the latter in the mouth. Jobert de Lamballe endeavored to effect the same object by in-

verting a portion of the internal surface of the ranula, and uniting it by a suture with the mucous membrane surrounding the orifice. M. Panas, of the Lariboisière Hospital, finding these methods of treatment unsatisfactory, and after having given a fair trial to the different remedies in vogue for the cure of this affection with equal unsuccess, has lately resorted to the practice of injecting these tumors with a solution (one to ten parts) of the chloride of zinc, the results of which are most encouraging. M. Panas injects into the tumor from three or four to eight or ten drops of this solution which also varies in strength according to the age of the patient, and this he does with a hypodermic syringe.

On the same subject, Mr. T. H. Morton, of Sheffield add:—

I might observe, without entering into the morbid conditions leading to obstruction of a sublingual gland or duct, that, practically, the surgeon's intention is to make a permanent opening in the sac, one which will allow the saliva continuous and natural exit into the mouth. It occurred to me, some years ago, that the use of a metallic seton acting, to some extent as a drainage-tube, would attain this object; and, as two cases (both children) came under my notice, I tried the following operation. An ordinary suture-needle, carrying medium-sized silver wire, having been passed directly through the sac-like tumor from one side to the other, the ends of the wire were brought forward, twisted together, and cut off, leaving a small ring of metal half within and half externally. The wire was allowed to remain three weeks, then cut and withdrawn. It caused no irritation or impediment, and a patent orifice remained after removal. Both cases were permanently cured. The ordinary seton, made of silk or hemp, necessarily sets up inflammation, and may induce subsequent closure or fistulous aperture. Injection of caustic fluids, as chloride of zinc in ranula, is open to objection, as destruction of tissue is not desirable, at least in simple cases of obstruction. The plan I suggest is worthy of extensive trial, as it promises to supersede those hitherto adopted.

#### THE TREATMENT OF BURNS.

It is always useful to have at one's fingers ends the best treatment for such common and painful emergencies as burns and scalds, and, indeed, such knowledge cannot be too widely diffused. The summary given by Mr. Holmes, in his recent *Manual of Surgery*, is very concise and complete, and embodies large experience. He says:—

At the time of the accident, the main indications are to exclude the air from the burned surface, to allay pain by opiates, and to give stimulants in such quantities as may be necessary. The applications which are in use for

burns are too numerous to mention, and the choice of one or other of them will depend in a great measure on the depth of the burn. A mere superficial scorch is best treated by some warm solution applied on a thick rag and kept constantly moist. Goulard-water with laudanum is perhaps as grateful as anything. Painting the surface with ink soon relieves the pain of a small superficial burn, or covering it with whitewash or some other similar substance, which will crust over it and completely exclude the air from it. Common flour thickly dredged on the part is a very good and handy application. But such crusts should not be applied over burned surfaces of the second degree, since their removal would soon become necessary, and this would drag off the epidermis. The bullæ should be pricked, the epidermis gently smoothed down, and some simple ointment put next the skin, or some oily substance which will not stick when it is necessary to change it. A very favorite application to these burns and to others of greater depth is the Carron oil, made by mixing lime-water and linseed oil, in equal parts, and deriving its name from its having come into extensive use at the great Carron Foundry in the numerous burns occurring there. Oil of turpentine is a very good application to those in which the surface of the skin is quite destroyed. But for the first few days I doubt whether anything is better than simply swathing the part in thick layers of cotton-wool, which is prevented from sticking to the burned surface by some simple ointment (cerat. calaminæ is generally used) spread on thin soft linen or cambric, and covering the whole burned surface. When, after a few days, the discharge becomes foul, this dressing should be changed for some deodorizing or antiseptic oily application, or the latter may be used from the first; but all the antiseptics I have yet seen used have been stimulating, and, for the first few days, it is desirable, I think, to avoid any local stimulation. The carbolized oil answers every indication better than any other substance which I know of, but it should not be used too strong; for it may both prove too stimulating, and thus increase the discharge, and it may be absorbed, producing a black condition of the urine, and other symptoms of incipient poisoning. It is well, then, to begin with a very weak solution (about 1 to 12), and if this does not correct the fetor its strength may be gradually increased, or a stronger solution of carbolic acid may be placed over the dressings. If carbolic acid is not tolerated, some preparation of benzoine, or Condyl's solution, or the lot. sodæ chlorinatæ may be applied either directly to the burned surface or over the dressings.

#### TREATMENT OF SPINA BIFIDA BY ELASTIC LIGATURE.

At the meeting of the Société de Chirurgie on May 3, 1876, M. Mouchet communicated two cases of spina bifida treated by elastic ligature. In the first case the tumor was at the level of the sacrum. It was first emptied by puncture, and an elastic ligature was then applied at the base of the sac. By the 21st day the child was cured. In the second case the tumor occupied the lumbar region, and the elastic ligature was applied immediately after birth without any previous puncture. The child died on the eighth day from intestinal troubles, but without any symptoms of paralysis or convulsion. Six cases in all have been recorded of this mode of treatment, out of which there are three successes, one failure, and two deaths.—*Obstetrical Journal of Great Britain.*

#### FETID FEET.

A very obstinate case of this complaint in a workman is reported in the *Bull. de Thér.* by Dr. Ortega. In the manufactory in which he worked he was avoided by his fellow-workmen, and when he entered a room the window would be opened. He had consulted several physicians, but without success. The epidermis of the sole of the foot was white and macerated, and there were little ulcerations at the clefts of the toes and around the nails. M. Ortega advised him to apply compresses soaked with a solution of chloral, which had the effect of rapidly destroying the smell and curing the ulcerations.—*Medical Brief.*

## THE CANADA MEDICAL RECORD

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FRANCIS W. CAMPBELL, M.A., M.D. L.R.C.P., LOND.

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#### TO OUR SUBSCRIBERS.

Will our subscribers have the kindness to attend to the accounts which we enclose. We have payments to make every month, and we need the money.

#### MEDICAL LEGISLATION.

Those of our readers who have, for the past year or more, followed closely our editorial columns will have noticed that a breeze was

blowing in the Medical Politics of the Province of Quebec. Among a certain number of the profession there was a feeling that the College of Physicians and Surgeons of Lower Canada—the legal custodian of the Profession's honor—was not wide enough awake; that much of the power which they in former days exercised was, from change of circumstances, obsolete, and that a radical alteration was necessary. To those who held these views we must at least give the credit of earnestness, for they proceeded to act upon their convictions, and it was with not little surprise that the College, and we may add the majority of the profession, a year ago, learned that legislation was being attempted, and that a Bill had actually been introduced by Mr. Chapleau, at their instigation, into the Legislature of the Province of Quebec, but which was not pushed beyond its second reading. While we have in the past not hesitated to say we considered the conduct of the prompters of Mr. Chapleau's Bill as not justifiable, yet it was not without some good result. The College had been somewhat tardy, through its Committee appointed at the Tri-Annual Meeting, held at Sherbrooke in 1874, in deciding what changes were needful; but the action of those who introduced this Bill, made them realize that work and not procrastination was necessary. After much discussion, at the meeting of the College of Physicians and Surgeons of Lower Canada, which was held in Quebec in October last, a Bill was decided upon, and at the opening of the present session of the Quebec Legislature, it was introduced by Mr. Loranger. Its principal feature was that the various Universities in this Province should give up the right which they possess under their Royal charter, to have the license of the College issue to their graduates without further examination. It was proposed to establish a central examining board, appointed by the College, before whom every graduate must appear and be examined before getting his license. To this proposition we believe McGill University, Bishop's University, and Victoria College assented,—certain conditions, however, being attached, as far as the first two Universities were concerned, and that was that the constitution of the College as regards members should remain as it was, viz.: licentiates, eligible after four years for election as members, and a fee of ten dollars attached. The Bill of

course had other good points, which space does not permit us to refer to. It was widely circulated, and was, so far as our experience went, generally considered an excellent Bill. The Medico-Chirurgical Society of Montreal, embracing, with one or two exceptions, every English practitioner in the city of Montreal, discussed it clause by clause, and recommended it, and a petition, signed by over two hundred licentiates of the College, embracing an almost equal number of both nationalities, in its favor was presented to the House. With such a backing, we think the Legislature would have been justified in accepting it. However, the College Bill and the Bill introduced by Mr. Chapleau last session were referred by the House to a special committee of its medical members, and on Thursday, the 14th December, those who had actively worked in connection with them appeared before the Committee: McGill University was represented by Dr. R. P. Howard; Bishop's University, by Dr. F. W. Campbell; Laval University, by its Director, the Rev. Mr. Hamel; Victoria College, by Dr. Rottot; The College of Physicians and Surgeons of Lower Canada, by its president, Dr. R. H. Russell, and its registrar, Dr. Fenwick; Drs. Lachapelle and Dagenais appeared on behalf of the Bill introduced by Mr. Chapleau; while the Sorel Medical Society was represented by Dr. Bruneau, and, not satisfied with either Bill, drafted one of its own, which was submitted to the Committee. The whole day was taken up by the above gentlemen in addressing the Committee, but the University of Laval declined to allow her *alumni* to be re-examined for the College license, and it then became evident that the main point in the Bill of the College, viz.: the Central Examining Board, would have to be abandoned. Laval expressed her willingness, however, to submit to a visitorial board being present at her examinations, this being what was done in England. It was a fact evident to all who were present that, to obtain amended Legislation, compromises had to be made on every side. The Committee of the House, therefore, referred the three Bills before them to a special Committee, composed as follows:—Dr. Russell of Quebec and Dr. Fenwick of Montreal representing the C. of P. and S. of L. C., Dr. Howard of McGill University, and Dr. F. W. Campbell of Bishop's University; Dr. Larue,

of Laval University, Dr. Rottot of Victoria College and Dr. Dagenais, representing the promoters of Mr. Chapleaus bill, and Dr. Marsden, representing the medical profession of the City of Quebec. To this Committee the three Bills were referred, with instructions to draft a Bill acceptable to all. To this—no easy task—the Committee set to work at 5 o'clock on Thursday evening, and they continued in session till they completed their labors, which was shortly after 2 o'clock on Friday morning. On Friday this Bill was submitted to the special Committee of the House and adopted, clause by clause; and on Friday, the 22nd of December, it passed its third reading in the Legislative Assembly, two alterations being made in the House. We had hoped to have been able to lay this important document in full before our readers in this number, in fact, delayed our issue one week for it, but it has been impossible to obtain in Quebec a copy of the Bill, we having been assured that only two or three English copies were printed, and that these were seized upon before they reached the House. We will, however, publish it next month. In the meantime we may say that the Bill is an extremely liberal one, inasmuch as it constitutes every legally qualified member of the profession at present practising in this Province a member of the College. For this they have to pay the sum of two dollars a year. Members are, however, not eligible for election as governors till they have been members for four years. The old title of licentiate is done away with, and the title of member substituted. Every practitioner in the Province is obliged to register within one year after the passing of the Act, and pay a fee of one dollar, and for every year which he allows to pass, and neglects this duty, he incurs a penalty of five dollars. The number of governors is increased from thirty-six to forty, the extra four being given to the District of Montreal. Each of the Universities and schools at present in existence in the Province, viz., McGill, Laval, Bishop's and Victoria, are entitled to two governors, and their election is not by the members, but by the Universities or Colleges which they will represent. The course of study which students shall follow is prescribed by this Act, instead of being, as formerly, a by-law of the College. It, however, remains as before, with the addition that a three months course of Hygiene is com-

pulsory, and that each student has to take a course of twenty-five demonstrations on Microscopic Anatomy, Physiology and Pathology. Hospital attendance is increased from one year to one year and a half. Every student has to pass his Matriculation examination before the Board on commencing the study, and to conduct this examination four examiners engaged in general education are to be named by the Board, two residing in Montreal and two in Quebec. The period of study, as before, extends over four years, and not less than three sessions must be at a University or College recognized by the Board. This clause will prevent any further graduation of students after two consecutive sessions at College. Of the three sessions at College, the first *must* be taken on commencing the study. Power is given the Board to frame tariffs for cities, towns and country, and no one can collect in any Court of Law who is not registered under this act, and paid his annual subscription of two dollars to the Board. This is a most important clause, and we would specially draw attention to it. The Board has power to appoint two "Assessors" for each University or School in the Province. The duty of the "assessors" shall be to attend the examinations, and report whether they are satisfactorily conducted or not. The Board has power to refuse registration of its degree to any University reported unfavorably upon until such time as the examinations are amended. These assessors are to be appointed outside of the Board of Governors, that is from among the outside profession. No certificate required by any Act now in force from any physician will be valid unless he be registered under this Act. The penal clauses of the Bill are very great improvements upon those of the former act. We cannot close this article without recording our estimation of the very great assistance rendered by the Medical members of the House. To Dr. Church, Provincial Treasurer thanks are especially due, as they likewise are to Drs. Cameron, Duhamel, Rinfret and Laberge.

#### PERSONAL.

Dr. J. E. Kennedy, professor of *Materia Medica* in Trinity College Medical school, has been named an attending physician to the Toronto General Hospital.

The following appointments have been made in the School of Medicine and Surgery of Montreal (affiliated to Victoria College). Dr. G. O. Beaudry, pro-sector to the chair of anatomy; Dr. A. Lamarche, demonstrator of anatomy and curator of the museum; Dr. Lachapelle, lecturer on hygiene.

Dr. William F. Scott (M.D., McGill College, 1876) of Hull, Que., passed his final examination, and was admitted a member of the Royal College of Surgeons of England, on the 15th of November last.

#### CIVIC SMALL-POX HOSPITAL STATISTICS.

(We do not think that a more telling argument in favor of vaccination could be found, than the following statistics of the death rate of the Civic Small-Pox Hospital, from November 7th, 1874, to Nov. 1st, 1876:—

*Protestant Hospital.*—Total number received, 168. Died, 34: = 20.23 per cent. There were 54 unvaccinated, and of these 25 died: = 46.29 per cent. There were 114 vaccinated, of these 9 died: = 7.89 per cent.

*Catholic Hospital.*—Total number received 396. Died 127: = 32.07 per cent. There were 165 unvaccinated, of these 89 died: = 53.93 per cent. There were 231 vaccinated, of these 38 died: = 16.45 per cent.

*In both Hospitals* 564 Received. Died, 161 = 28.54 per cent.

Unvaccinated, received 219. Died, 117: = 53.42 per cent.

Vaccinated, received 345. Died 47 = 13.62 per cent.

We would suggest that, as many who have been vaccinated, reject re-vaccination as useless, it would be advisable in future to keep a record of the cases of small-pox which occur among the re-vaccinated. We have no doubt but that the result would prove the all but absolute safety which re-vaccination gives.

#### SPENCER WELLS' METHOD OF OPERATING.

A correspondent in the *Boston Medical and Surgical Journal* thus describes the method of the great ovariologist as witnessed during the seven hundred and ninety-fifth operation:

"1. Those invited to attend were requested to sign a certificate that they had not been pre-

sent within seven days at a post-mortem examination, visited a dissecting-room, or treated a case of contagious disease.

"2. They were then, punctually to the moment appointed, taken to an upper chamber, with bright, open exposure to the southwest, where Mr. Wells stood in readiness for his patient, who was already anesthetized.

"3. Bichloride of methylene was the agent administered; or rather air charged with methylene by means of a caoutchouc pump.

"4. The lower extremities were confined by a band across them; the upper ones by a strap to each wrist, the arm being brought down beneath the table and fastened to one of its supports.

"5. The abdomen was covered by a thin rubber sheet, with a circular opening adapted to the possible length of the incision. Beneath the table, to catch the fluid contents of the cyst, or any thing which might drip, was an ordinary metallic hip-bath tub. Under the edge of the table, fastened so as to be within immediate reach of the operator, hung Mr. Wells' large spring-trocar, with a long curved arm, to which was attached a rubber tube of great caliber communicating with the tub beneath.

"6. None of the bystanders were permitted to examine or otherwise touch the patient.

"7. The incision was short, low down, occupying but a portion of the umbilico-pubic interval, and was completed upon a director of peculiar form, broad toward its rounded extremity. There were extensive adhesions, which were broken down by the hand with tolerable ease. Moderate hemorrhage occurred from their site, and from vessels in the line of incision. The cyst was multilocular, one of its cells containing a large amount of turbid fluid. Through the trocar-opening, sufficiently enlarged, Mr. Wells passed his hand and broke down such of the adjoining septa as would thus yield. The mass having then been readily delivered, a stout, slightly curved steel clamp was attached to the pedicle, and on severing this the first stage of the operation was completed in ten minutes from the first stroke of the knife.

"8. The other ovary, though still small, proving cystic, was also removed, the base being transfixed by a double silk thread tied on each side.

"9. All coagula having been carefully removed from the peritoneal surface and pelvic cavity, the clamp was adjusted crosswise externally, and the wound was closed by seven stitches, the pedicle emerging between the last and the last but one. These sutures, like the ligature already described, were of Chinese silk, uncarbolicized. They were passed through both the integument and the peritoneum, without, however, taking up the whole thickness of the abdominal wall, and during their tying the loose pouch of the abdomen was bunched up, as it were, by the hand of an assistant. The threads were provided with a needle at each extremity, the second of which was held by the operator's lips while the first was being passed, thus preventing twisting and other entanglement, and permitting greater speed.

"10. The wound having been closed, bits of lymph were carefully placed under the clamp and between the sutures; the extremity of the pedicle outside the clamp was touched with solid perchloride of iron; the abdomen was covered with cotton-wool, over which were strapped broad bands of adhesive plaster; a binder of flannel was placed outside this, and the entire operation was completed in just half an hour from its commencement.

"Nothing could have exceeded the adroitness and celerity yet absolute thoroughness and perfect neatness of the whole procedure. There were two female nurses and two assistant surgeons, besides the gentleman in charge of the anæsthetic. They were all constantly occupied, and each knowing exactly what to do, at what moment, and how, never came for a moment into the others' way; so that there were six busy pairs of hands, every one at its especial work. The operation, from beginning to end, was as if done by the most perfect yet sentient mechanism, and was an apt illustration of the consummate skill that only such unequalled practical experience as that of Mr. Wells could produce."

#### HYGIENE OF THE HAIR.

Bazin, the distinguished surgeon of the St. Louis Hospital, in an article for the *Dictionnaire des Sciences Médicales*, says that under ordinary circumstances the care required for the head should be directed merely to favoring the removal of the dust and deposit upon the

hairy scalp. In very young infants the brush and comb should give place to simple acetic or alkaline lotions or the inunction of some fatty substance, such as cold cream or the oil of sweet almonds. The practice of washing the scalp with warm or cold water is essentially bad, because it renders the hair dry, brittle, and lusterless. In women the more or less complicated methods of dressing the head which prevail necessitate the squeezing, dragging, and twisting of the hairs in every direction—processes extremely unfavorable for their nutrition. Ladies should be taught that hairs, though insensible to pain, are not inert and lifeless, and that the most hygienic of all coiffures is that which leaves to the hair the greatest liberty and aëration and the most frequent repose. The habit of wearing the hair long in men is bad, because they rarely spend the requisite time in cleansing it. The practice of clipping it close to the head is detestable, and absolutely contrary to the purpose for which it was designed. Cutting the hair short, in order to favor its growth, is the result of a prejudice which nothing can justify, while periodic hair-cutting within reasonable limits is not injurious. Contrary to the generally received opinion, Bazin concludes that the finest heads of hair are those which the scissors have never touched. The habit of "refreshing" the hair—that is, of cutting away from time to time a small portion—may be indicated when the growth is thin, wasted, or meager. The use of the razor should *always* be avoided, even when it is required to cut the hair very short as in convalescence from grave disorders. Epilation, when employed for the purpose of removing white hairs, only hastens the supervention of canities. The employment of cosmetics, instead of being allowed as of common usage, should be strictly confined to certain cases. Those who when in perfect health have naturally greasy hair should be advised to use very weak alkaline lotions. Those, on the contrary—who have dry and harsh hair may use oily applications. Without expressing much confidence in the measure designed to prevent the loss of hair, the author concludes that sometimes the effort should be made. Hair-dyes are of two kinds. The first (galls, infusion of nuxvomica, and pomegranate) is almost inoffensive, but gives uncertain and unstable results. The second—whose basis is generally lime, nitrate



of silver, lead, or sulphate of iron—is successful in the result but dangerous for employment.

#### CAUSES OF PUTREFACTION AND FERMENTATION.

The *Popular Science Monthly* says:—A year or two ago, Dr. J. Dougall, of Glasgow, at the Social Science Congress, held in that city, announced, as the result of investigations made by himself, that the presence of an alkali determines putrefaction in organic matter, while the presence of an acid determines fermentative changes. The same line of inquiry has been taken up since by Dr. John Day, of Victoria, Australia, who finds in Dougall's discovery an explanation of the presence in hospitals of septic poisons, giving rise to pyæmia, erysipelas, and puerperal fever. The *Sanitary Journal*, of Toronto, has a paper by Dr. Day upon this subject, the purport of which may be briefly stated as follows: Hospitals, as usually constructed, have alkaline ceilings, alkaline walls, alkaline floors (owing to the use of soap in cleansing them). Experience has shown that pyæmia is of extremely infrequent occurrence in temporary hospitals consisting of rough wooden sheds. The incessant generation of peroxide of hydrogen by the turpentine of the wood doubtless prevents putrefactive changes, but, as turpentine always gives an acid reaction, this circumstance must greatly increase the disinfecting power of the peroxide, by determining the fermentative instead of the putrefactive decomposition of the pus-cells and other organic matter given off from the patient. Dr. Day proposes the following method of counteracting the evils of hospital life: The boards of the floor he would first cover with a coat consisting of equal parts of gasoline and boiled linseed-oil, to which is added a little benzoic acid. When dry, the surface is polished with a paste of beeswax, turpentine, and benzoic acid. Boards so prepared are, in his opinion, rendered permanently disinfectant. The walls and ceilings might be rubbed smooth, and coated with a varnish of paraffine or oil of turpentine; or, better still, they might be coated with silicate paint, then rubbed down and varnished. For the purpose of keeping the air pure, and destroying the pus-cells floating in it, he recommends, in addition to ventilation, the use of certain volatile substances, such as gasoline, benzine, and eucalyptus oil. The furniture should be occasionally

brushed over with either gasoline or benzine, in which a little benzoic acid has been dissolved.

#### ARTIFICIAL TOBACCO

According to the *Scientific American*, artificial tobacco leaves are now being produced in New York for the manufacture of Havana cigars. The material used is a kind of brown wrapping-paper, made especially for the purpose. This paper is saturated with the juice pressed from tobacco stems and other offal, and then rolled through a machine which gives them the appearance of the tobacco leaf, with the peculiar spots printed on them as on calico. The paper thus prepared is especially adapted for the wrappers around the cigars, and for that purpose is even preferred by the Havana cigar makers to the genuine leaf, and they import it largely from New York. According to our authority as much as 30,000 reams of this artificial tobacco leaf have been occasionally exported. It is further stated that this tobacco-flavoured straw paper makes also a filling superior to the genuine leaf, and that the paper leaves no residuum other than a pure light grey or nearly white ash, just like that of the best quality of tobacco.

#### BI-CARBONATE OF SODA IN SUPPRESSION OF URINE.

Dr. Wilson of Clay Cross writes, in the *British Medical Journal* of the 22nd of July last, that he has applied the following plan with marked success in the treatment of suppression of urine. He says:—"I allude to cases of complete suppression, with general dropsy, coma and convulsions. Here an enema of half an ounce of acetate of potash in from one to two quarts of warm water, poultices (linseed or digitalis) to the loins, cold to the head and sinapisms to the leg. Where there is much irritability of stomach in acute desquamative nephritis, this alkaline enema is a valuable adjunct to treatment."

The Philadelphia correspondent of the *Boston Medical Journal* says the attendance at the Jefferson and the University Medical Schools in that city is larger than ever before. He accounts for the increase in spite of the hard times, by saying that most likely they reason thus: "There is nothing else to do, let's be doctors." He says, "you may have heard the story of Sir Walter Scott's colloquy with a grave, sagacious-looking doctor, attired in black,

for whom, in a small English town, Scott had sent on behalf of his sick servant. In the doctor, Scott, to his amazement, recognized a Scottish blacksmith, who had formerly practised as a veterinary operator. "How in the world" exclaimed Sir Walter, "came you here? Can it be possible this is John Lundie?" "In truth it is, your honor, just a' thats for him," "well, let us hear, you were a horse doctor before; now it seems you are a man doctor, how do you get on?" "Oh, just extraordinar' well, for your honor maun ken that my practice is vera sure and orthodox. I depend entirely on twa simples." "And what may their names be? Perhaps it's a secret." "I'll tell your honor" (in a low voice) "my twa simples are just laudamy and calamy," "simples with a vengeance!" replied Sir Walter, "but, John, do you never happen to kill any of your patients?" "Kill, ou ay, may be sae, whiles they dee, and whiles no; but it's will o' Providence. Onyhoo, your honor, it will be lang before it maks up for Flodden!"

#### DROPSICAL EFFUSIONS.

Dr. Charles Burr, of Carbondale, Pa., (*Philadelphia Medical and Surgical Reporter*) tells us, in the *Pennsylvania State Transactions*, that he used to feel quite uncertain when called to a case of dropsy, but now he "can smile and promise a speedy cure." The reason of this change is his adopting in all such cases the following prescription:—

℞ Infus. digitalis, f. ʒ iv  
Potassæ acetatis, ʒ ss. M.

Dose—For an adult a tablespoonful, for a child a teaspoonful, every two hours.

If this prescription will exercise generally so happy an effect on physician and patients, our readers will thank us for reproducing it. We are very doubtful, however, of its universal efficacy.

#### LONGEVITY.

A remarkable case of longevity is reported in Virchow's *Archiv*, by Dr. Ornstein of Athens. The man, George Stravarides, died in Smyrna, at the age of 132 years. Although this Methuselah had always lived an irregular life, and had consumed an average of more than a hundred drachms of brandy daily, he retained full possession of all his five senses, as also a complete set of teeth, up to the moment of his death. He also continued to the last to attend to the duties of his avocation—a

baker. This man was born in 1743, in the reign of Mahmud I, and lived during the reigns of nine sultans.

—The Russian army, on January 1, 1876, had 2102 surgeons, 250 apothecaries, 6887 assistant surgeons, and 173 veterinary surgeons. This gives one surgeon for every 407 men, one apothecary for every 3454 men, and one assistant surgeon for every 161 men.

#### MEDICAL ITEMS.

The death of Dr. Arthur Jacobs of Dublin is announced. He was born in 1790. His memory will be kept alive by the "membrana Jacobi" of the eye. He was the founder and original editor of the *Dublin Medical Press and Circular*.

Our contemporary, the *Pacific Medical and Surgical Journal*, occasionally gives its readers a *feu d'esprit* at the expense of the homœopaths, who, however, no doubt enjoy them as much as their "allopathic brethren." The following is the latest: A homœopathic doctor of Cairo, Ill., writes to the homœopathic journal of Chicago that he has been suffering for twelve years with neuralgic pains, resulting from a fall from a horse. He says: "I have used *Aconite* low, *Ars.* high and low, *Arnica* high and low, *Bry.* high and low, *Merc. Viv.* and *Bin-iod.* low, *Kali-hid.* low, and *Canth.* high and low, and nothing but counter irritation and rest ever gave me any relief. Will any of my professional brethren suggest a remedy?"—We will suggest a remedy on the principle of *similia similibus*. Take a strong bottle filled with water and let it fall from a horse as nearly as possible in the way you yourself fell. Take one drop of the water thus medicated, potentize it low, and smell it. If that should not cure you try it high.

#### MARRIAGES.

At Quebec, on the 31st October, at the St. Louis chapel, Basilica, by Monseigneur Cazeau, P. Arthur Shee, C.M., M.D., Inverness, Megantic, to Marion, only daughter of the late James Lynch, lumber merchant.

#### BIRTHS.

In Montreal, on the 31st December, the wife of Alexander Proudfoot, M.D., of a son.

In Lindsay, Ont., on the 27th November, the wife of Dr. Kempt, of a daughter.

#### DEATHS.

In Brantford, Ont., on the 2nd of November, Reginald Digby, second son of Dr. Henwood, aged 19 years.

## Original Communications.

*Treatment and Prevention of Post Partum Hæmorrhage.* By A. A. HENDERSON, M.D., of Ottawa. Read before the Bathurst Medical Association.

GENTLEMEN,—America is eminently practical. In medicine, as in science, the chief object is to make all things practically serviceable. More attention is given to the preparation of elegant and convenient elixirs and fluid extracts, and to make pills more palatable by coating them with sugar or gelatine, than to elaborate theories. Accepting this precedent, I will to-day read a short paper upon one of our most practical subjects. *Uterine hæmorrhage* is a subject of importance. In the practice of our profession we may at any moment be called upon to stand face to face with death in this, its most appalling form; but, thanks to the advancement of knowledge in the age, we can now grapple with, and overcome the "KING OF TERRORS" in this, one of his strongholds. Every physician is familiar with the general rules for the treatment of uterine hæmorrhage, and all must have been impressed by the fact that the views held by many obstetrical authors conflict. My object in selecting this subject is to ascertain what method of management the gentlemen of this Association have found to be most successful. With this object in view, I shall consider as briefly as possible the general rules of treatment without entering into details, mentioning only those which are to my mind most practical as well as most rational.

*Post Partum Hæmorrhage* may occur before or after the separation of the placenta. Brevity is necessary, therefore I shall discuss only that form occurring immediately, or within a short time after the separation of the placenta.

This is caused either by—I. *Uterine Inertia*. II. By *Hæmorrhagic Diathesis*. III. By *Mismanagement*, such as moving or exciting the patient. IV. By *Laceration* of the soft parts. V. Or by *Retention* of a small portion of the adherent Placenta, or of a coagulum.

In such a case, when caused by *uterine inertia*, the contractile power of the uterus must be restored in the most prompt manner possible. To do so, the general circulation requires to be supported, or local treatment will be of no

avail. To regulate the heart's action in order to accomplish this, *stimulants*, of which brandy and ammonia are most popular, are imperatively indicated, and generally in large quantities. Should the stomach refuse to retain it, brandy and milk may be injected into the rectum, or ether be injected hypodermically. Admit fresh air freely into the apartment. Stimulants are indispensable, because the contraction of the uterine fibres must be produced and maintained, in order to thoroughly control hæmorrhage from that organ; and, as extreme loss of blood impairs the contractile power of the uterus, through consequent exhaustion of the nerve force by reason of a too scanty supply of blood to the uterine nerve centres. Therefore the heart's action *must* be stimulated in order to make the remaining small quantity of blood fulfil the purpose of the larger quantity which is normally present.

In addition to stimulants, two other remedies are of inestimable value in such cases. They are *opium* and *ergot*. Although they are both used as remedial agents in flooding, yet they differ widely in their effect, consequently either will be of service only under suitable circumstances. *Ergot*, to be beneficial, must be given before the uterus has lost its irritability. Hence its action is that of a *preventative*, as well as that of a *curative* agent. The *hypodermic injection of ergotine* may be favorably mentioned as a mode of obtaining the specific effect of the drug in cases where the use of *ergot* in the ordinary way is inadmissible. The strength of the solution for this purpose should be *one to two grains in 10 M. of water*. If *ergotine* cannot be obtained, the *fluid extract of ergot* may be used instead, in the same way. From 15 to 30 M. should be used at each time, but its action is not so satisfactory.

*Opium*, in a full dose, on the other hand, is beneficial when the hæmorrhage is excessive, and has caused uterine exhaustion. Here, acting as a stimulant, it saves the patient from the consequences of extreme loss of blood; but, under *no* circumstances, must it be given when the loss has been so slight as not to impair the uterine tone, or the result be disastrous.

The application of the infant to the breast may be mentioned as being sometimes beneficial.

It is with reference to *local treatment* that the greatest discrepancy of opinion prevails.

*Friction* over the uterine surface is not worthy of any reliance.

*Firm pressure*, with *manipulation* over the fundus uteri has a powerful influence, as it tends to secure a uniform contraction of that organ. It is useful as a means both of checking and of preventing flooding. Supra pubic pressure should be maintained *before* the separation of the placenta, to prevent irregular contraction, and consequent retention of the placenta. It should be also maintained *after* the separation of the placenta, to prevent the uterus relaxing and becoming filled with blood.

The *introduction of the hand into the uterine cavity*, accompanied by counterpressure outwardly is beneficial in an especial degree when the uterus contracts irregularly; also when used promptly in inertia, but *never* in inertia when flooding has been so great as to cause *extreme exhaustion*, for the shock which it then occasions might prove fatal.

*Cold water or ice*, as a local application, should be used with discretion, as it is a powerful means for good or ill. It may be applied, according to the necessity of the case, to the vulva, sacrum, or abdomen; or cold water may be injected into the vagina, or even into the uterine cavity itself, if circumstances may demand it. It should only be resorted to in cases where manipulation has been tried and found insufficient, for the habit of resorting to ice or cold water when the first gush of blood is seen is a practice that is as *pernicious* as it is *uncalled for*.

When a *hæmorrhagic diathesis* exists, flooding should be anticipated, when such is possible, by appropriate treatment previous to, as well as during, confinement. What that treatment is, must depend upon whether *plethora* or *anæmia* be the cause.

With reference to the *fourth* and *fifth* enumerated causes: if, in any case, after the removal of the placenta, flooding should continue, although the uterus be properly contracted, a vaginal examination should be made, with a view of ascertaining the cause. If *laceration* of the os be detected to be the cause, immediate benefit will be obtained by saturating a tampon with a strong solution of tr. ferri mur., and applying it to the os. The application of iron in this case is quite free from the grave objections which can justly be urged against its

use as an injection into the uterine cavity. *Hæmorrhage* from *laceration* of the *vagina* or *perineum* must be treated according to the extent of the injury, either by astringent applications or operative interference. If no laceration of the soft parts be found sufficiently extensive to account for the symptoms present, then the examination should be continued into the *uterine cavity*, as possibly a portion of retained placenta or a firm coagulum may be the cause. If it be so, the necessary treatment must immediately suggest itself, *i. e.*, removal of that which, in reality, has become a foreign substance.

One other important means of controlling hæmorrhage yet remains to be mentioned. A means highly lauded by several obstetrical authorities, and as strongly condemned by others, whose opinion merits an equal confidence. I refer to the *injection into the uterine cavity* of a solution of the *tinct.* of the *perchloride of iron*. By taking a course between these extremes, we arrive at the *practical truth*, which is what we require. It cannot be denied that its use is sometimes dangerous to life, and that death has resulted from it; while it is equally true, on the other hand, that under certain circumstances, the patient must die if it be not used. In employing it, the most approved strength of the solution is 1 to 2, or 1 to 3 of water; and of this about  $\frac{3}{4}$  viii should be injected, particular care being taken to pass the end of the tube up to the fundus uteri, and to inject slowly. It checks the hæmorrhage instantly, but it should never be used otherwise than as a *dernier resort*, after the failure of all other available means, such as have already been mentioned. The danger attending its use lies in the fact that sometimes the contraction of the uterus after its use is not perfect, and in such a case the partially open extremity of each vein and sinus is closed by a coagulum, which certainly perfectly checks the flow of blood. Absorption of the septic matter caused by the decomposition of those coagula is certain, in such a case to occur, and death, in all probability, be the result. Great care, then, ought to be taken to ensure complete and permanent contraction of the uterus, after injecting the styptic solution as a prevention of such a disastrous consequence—bearing in mind that the injection into the uterine cavity, of a solution of *iron*, of any strength, and with all possible care, *may* be fol-

lowed by such a dire result. I shall, nevertheless, when other feasible means fail, never, for one moment, hesitate to use it in any case of mine, as it gives a prospect of ultimate recovery, in the room of inevitable death.

Thus far, gentlemen, the management of hæmorrhage, when once it has taken place, has been considered. The aim of the accoucheur, however, should be not to wait until it *has* occurred and then control it, but to adopt means which shall prevent it from setting in at all. It is quite possible that cases *may*, nay certainly they *will*, occasionally be met with, in which all possible care cannot prevent the occurrence of this grave complication of labour; but I do unhesitatingly affirm that, by adopting proper, preventative treatment, the occurrence of post partum hæmorrhage would be almost unknown. I have omitted to mention many of the methods sometimes used for checking flooding when it has set in, for my chief object is to elicit discussion upon the possibility of an almost universal protection from it. Indeed the treatment of post partum hæmorrhage may be summed up in one sentence, viz., we must cause firm uterine contraction by some means, and, to do so, we must trust to our judgment to accomplish that with the means which may be at our disposal at the moment. As hæmorrhage, when it has occurred can only be checked by inducing firm uterine contraction, so the *prevention* of it can only be accomplished by obtaining the same firm uterine contraction, but obtaining it earlier in the case. I have tested preventative treatment thoroughly, and have not in a single instance had hæmorrhage which necessitated any interference whatever. The mode recommended may appear very simple, but it is as effectual as it is simple.

In any suspicious case of labour, ergot in a full dose as a preventative, is advisable; but not waiting for the head to press upon the perineum as is sometimes directed. It should be given at least half an hour before delivery is effected, in order to allow it time to act.

If there be marked anæmia, or threatened exhaustion, I do not by any means look upon the judicious administration of stimulants during labour, to be just so much poison. I certainly feel convinced that in more than one instance my patient's life was saved by them. Stimulants during labour, like opium or ergot, should only

be used when indicated; as, like them, if administered when contra-indicated serious consequences might result. It cannot be denied that when there is much exhaustion during labour there is more danger of deficient uterine tone, and consequent flooding after it.

In every case I remove the child gradually, and follow it down by the nurse pressing above the fundus uteri. After the birth of the child, I direct the nurse to maintain proper pressure over the fundus to prevent the uterus from relaxing till the funis is secured and divided. When that has been attended to, I press gently, but firmly, over the uterus to insure proper contraction upon the placenta, which will be accomplished in a few moments. I then, carefully maintaining with my own hand a proper degree of pressure, have the patient gently assisted from the left lateral position which she has occupied during labour, to the dorsal position. This usually causes the placenta to be at once expelled into the vagina, without any traction upon the cord. If it should not do so, pressure upon the fundus of the uterus, and directing the patient to cough, will soon accomplish it. It is then only a question of a few moments to remove it from the vagina. This prompt expulsion of the placenta is a matter of importance when flooding threatens, or has taken place, because, from the moment that the utero-placental circulation is interfered with, the placenta becomes a foreign body, preventing the uterus from contracting properly upon, and so closing the open extremities of the uterine blood vessels, which alone can give perfect safety from hæmorrhage.

I now, in every instance, remove the placenta with the patient in the dorsal position; and, having tested both lateral and dorsal postures, decidedly prefer the latter. Its advantages over the *lateral*, during the expulsion of the placenta are—

1. It causes the placenta to be almost instantly expelled.

2. It prevents the admission of air into the vagina, or uterine cavity, and causes the expulsion of any that may have entered during or after the birth of the child. That air does sometimes enter the vagina, especially when the abdominal parities are relaxed and the patient in the lateral posture, is made evident by pres-

sure, or by turning the patient upon her back, when it will be audibly expelled.

3. It lessens the chances of post partum hæmorrhage, by placing the uterus, emptied of its contents, more perfectly under the control of the accoucheur than any other position.

Before I conclude I must call your attention to the very novel mode of treatment recommended by Dr. Mann, of Rhode Island, who has recently drawn attention to the injection of warm water (117 F.) in post partum hæmorrhage, as well as in that of abortion and placenta prævia. His views have been sustained by Dr. Windlebrand, who recently read a paper upon the subject. It is claimed to act by stimulating the uterus to immediate and firm contraction. They repeat the injection at intervals of a few minutes till the effect is produced. This requires to be further investigated.

I shall not occupy your attention longer. I have mentioned, very briefly, some of the chief points of the prevention and treatment of post partum hæmorrhage, which have been tried and found satisfactory. I have not stated theories, but tested facts. I hope that this short paper will elicit from the gentlemen of this Association some important facts from their experience respecting the subject.

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## Progress of Medical Science.

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### LECTURE ON FEVERS.

BY ALFRED L. LOOMIS, M.D.

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#### TYPHOID FEVER TREATMENT.

GENTLEMEN:—Before speaking in detail of the treatment of typhoid fever, I will say a few words concerning its prevention.

If the modern theory (which I have already given you) of its etiology be accepted, the question naturally arises, cannot the typhoid poison be prevented from entering our dwellings, or polluting our drinking water?

Facts prove almost conclusively that typhoid fever is never of spontaneous origin. Should it occur in the locality where you may reside, if possible find out its origin. If no case has ever before occurred in the locality, endeavor to ascertain the manner in which the typhoid poison has been introduced. If it is already endemic, limit the disease to the first few cases

by a most thorough disinfection, and remove all those surroundings which favor the reproduction of the typhoid poison.

If the theory is correct, that typhoid fever is dependent upon a poison contained in the excrement of a typhoid patient, then the poison should be destroyed as soon as it is discharged from the body. For this purpose the intestinal discharges should be received into a porcelain bed-pan (not a tin one), the bottom of which should be covered with a thin layer of powdered sulphate of iron; immediately after the discharge, crude muriatic acid, equal in quantity to one-third of the fecal mass, should be poured over it. Never empty the discharges from a typhoid patient (no matter how thoroughly they may have been disinfected) into the privy or water-closet used by the family. Trenches should be dug for their reception, and new trenches should be opened every few days; the greatest care should be taken that these trenches are not so situated that drainage from them can contaminate wells or springs which furnish drinking-water. All under-clothing or bed-clothing that may have become soiled by the discharges from the bowels should be immediately immersed in chlorine water, and thoroughly boiled within 24 hours. This procedure will certainly destroy the infective power of the typhoid poison contained in the intestinal discharges, and in the majority of instances you will prevent the spread of the fever.

Repeated observation shows that when one member of a family has typhoid fever, not unfrequently it is developed in every other member. This spread of the disease can be prevented, unless there is some local cause for its development which cannot be reached.

When its origin is not apparent, the wells, springs, and all the sources from whence water is derived for drinking and cooking purposes should be carefully and thoroughly inspected. Care must be taken that the waste-pipes from wells and springs do not pass directly into cess-pools or sewers, and thus become a means of the conveyance of impure gases into the springs and wells.

The greatest care must also be exercised in regard to home drains and sewer-pipes, that they shall be free from leakage and obstruction, and that all water-closets, sinks, and other openings into them be provided with suitable traps.

When unpleasant odors are constantly present in dwellings, especially in sleeping apartments, disinfectants should be thoroughly employed, and the house be kept thoroughly ventilated.

When it may be necessary to open drains and cesspools in a dwelling for purposes of repair and cleansing, the same precautions should be exercised; these are especially of importance during the summer and autumn.

In conclusion, let me impress upon you this fact, that when typhoid fever is carried from



the sick to the healthy, the evacuations are the chief, if not the only means of contamination; consequently, the importance of thoroughly disinfecting the excrements of typhoid patients should always be borne in mind.

In this connection the question naturally arises, can we not counteract or neutralize the effects of the fever poison after it has gained admission into the system, and thus prevent the development of typhoid fever? To accomplish this, at one time blood-letting was resorted to; but at the present day few practitioners would venture to suggest such a plan of treatment, and few patients could be found willing to submit to it. Emetics were given on the supposition, that the fever poison acted primarily upon the mucous membrane of the stomach, and that the offending agent might be removed by their early administration, and thus its absorption into the system prevented. As it has been proved that the typhoid poison can be introduced into the system through other channels than the stomach, and as experience has shown that emetics have not the power to prevent the development of typhoid fever, their use has been abandoned. Diaphoretics have also been employed; but there is not the slightest proof that typhoid or any fever poison was ever removed from the system by sweating. A patient with some of the premonitory symptoms of fever may sweat, be relieved, and at once recover, but such a patient has not received the typhoid poison into his system, and was not, as is sometimes said, "threatened with typhoid fever."

Notwithstanding the bold affirmation of the author of the cold affusion plan of treatment, that if it were resorted to before the third day of the disease, it would invariably arrest its development, it has failed to stand the test of practical experience.

More recently, sulphate of quinine administered in large doses, has been thought to have the power of arresting the development of typhoid fever in the same way that it arrests malarial fever, by its anti-periodic power; but there is no evidence that it has any such power, and as a prophylactic remedy it has been abandoned.

I might go on almost indefinitely enumerating measures which have been resorted to for preventing the development of this fever; but after the poison has once gained entrance into the system, no means have as yet been discovered by which it can be counteracted or neutralized so as to prevent the development of this disease. The duty of the physician, so far as he may be able, is to guide the disease to a favorable issue, and prevent injury to organs essential to life, keeping in mind that a certain definite period must elapse before this result can be accomplished.

Before entering into a detailed account of the

treatment to be pursued in the management of a case of typhoid fever, I will say a few words in reference to the arrangement of the sick-room of fever patients. Though often overlooked, this is a matter of no inconsiderable importance, not only as regards the comfort of the patient, but it has much to do with the successful issue of the case.

It is of the greatest importance that a properly qualified nurse be selected; one who has had experience in the care of fever patients is to be preferred. In the next place, the patient should be placed in a large and well-ventilated apartment. All furniture should be removed from the sick-room, except those articles which are necessary for the comfort of the patient and the convenience of the attendants. Remove the carpets from the floor, place your patient in a bed of moderate size in the centre of the room, and let there be free ventilation during both day and night.

The temperature of the apartment (if possible) should be kept below 60° F.

The bed and body linen of the patient should be changed daily, and at once be removed from the sick-room and placed in a weak solution of chloride of sodium; especially is this important if the patient is having frequent discharges from the bowels. The apartment should be kept perfectly quiet, the light subdued, and only the attendants should be allowed in the room.

These preliminary arrangements having been made we will suppose we have in charge a patient with a mild type of typhoid fever. All medicinal interference in such a case is unnecessary. The treatment resolves itself into the arrangement of the sick-room and proper diet; milk is preferable, fruits are not to be allowed in any case. In the mildest case the care in diet is important, and the patient should be kept in bed until convalescence is fully established. This should be insisted upon, even in the mildest cases.

As I have already stated, the temperature in a mild type of this fever rarely rises above 103° F.; therefore there is no necessity for resorting to antipyretic measures; frequent sponging of the surface with cold or tepid water, as is most agreeable to the patient, will be found of service.

By far the larger number of cases of this fever are of a more severe type, and, though in your treatment you must be guided by the circumstance of each individual case, usually you will be obliged to resort to more decided measures.

Remember that there are no specifics for this disease; all of those which have been proposed and employed have either fallen into disuse, or are resorted to only as aids in general treatment.

Typhoid fever is a disease that has certain stages to pass through, limited only by days and weeks. There is great doubt whether the physician can shorten its duration by a single day,

but experience warrants the belief that many lives may be saved by remedial measures used at the proper time, and combined with judicious hygienic management.

There are critical periods in this disease; be prepared by knowledge and judgment to carry (if possible) your patient safely through them. Unquestionably one of the most important things to be accomplished is the reduction of temperature, or rather the keeping of the temperature below a certain standard. Blood-letting, emetics, diaphoretics, cathartics, chlorine water and mineral acids have all been resorted to in order to reduce temperature. The last two agents were supposed to reduce temperature by neutralizing the typhoid poison. At the present day I think there is no intelligent physician who imagines he can neutralize the typhoid poison, and thus reduce temperature, while only a few years ago these agents were supposed to possess such power, and were very extensively employed for such a purpose by some very intelligent physicians.

The agents which more recently have been employed for this purpose, namely sulphate of quinine and cold applications, are powerful agents in reducing the temperature and lessening the severity of the disease; but they can never shorten its duration, and, if you employ them, expecting this result, you will be greatly disappointed. It is claimed by many very distinguished observers of the present day that the parenchymatous degenerations of the different organs and tissues of the body, which are found in those who die of typhoid fever, are due to the prolonged high temperature which is present during the course of this disease; but as yet there are no facts to prove this assertion, for the same parenchymatous changes are found in the bodies of those who have died of diseases, the course of which was not marked by high temperature, and did not extend over a period of forty-eight hours. So far as we are able by analogy to determine upon what these parenchymatous changes depend, we are led to believe that the specific poison of the disease has more to do with their development than the high rate of temperature. One thing must be apparent to every clinical observer: that the injurious effects of a prolonged high temperature are early and most markedly shown by disturbance of the cerebro-spinal system. It is still an unsettled question whether these disturbances are due to the primary changes in the constituents of the blood, which always accompany a high range of temperature, or to the direct effects of the high temperature on the nerve centres.

Whichever view we accept or adopt, the employment of those means which have the power of safely reducing temperature is indicated, and, when judiciously used, they have much to do with the safety of the patient.

All those means which have been employed

for the reduction of temperature are included under the general term of *antipyretics*, and the treatment of disease by the use of these agents has received the name of *antipyretic treatment*.

Unquestionably the most efficient and reliable of the antipyretic agents are the external application of cold by means of baths, packs and effusions, and the internal administration of sulphate of quinine. The quinine is not administered to produce any specific action upon the typhoid fever poison, but is employed for its antipyretic power. There are other antipyretic agents besides these two, but they are of so little importance that it is necessary to give them only a passing notice after we shall have considered these two important ones.

At the present time, to a great extent, the opinion prevails that the application of cold to the surface is the great antipyretic in the treatment of fever. This is no new teaching. Long ago Dr. Currie recommended the application of cold to the surface of the body for the purpose of rapidly reducing temperature, and proved that it had such an effect; yet it was never very generally practised, and soon fell into disuse, as there was nothing reliable to guide one in its application. As we now have the thermometer to guide us in its application, more recently it has been resorted to with considerable success.

I will give you some general rules, which may be of service to you in the use of this antipyretic in the treatment of typhoid fever.

As soon as the axillary temperature in the evening rises above  $103^{\circ}$  F., place the patient in a water bath having a temperature of  $70^{\circ}$  F. or  $80^{\circ}$  F., and gradually lower that temperature by the addition of cold water or ice, until the temperature of the patient begins to fall. You may be compelled to lower the temperature of the bath to  $60^{\circ}$  F. before the temperature of the patient is affected; but the lowering of the body temperature must be accomplished by the lowering of the temperature of the bath, taking care that the latter does not fall below  $60^{\circ}$  F. When the temperature begins to fall, renew your thermometrical observations every two or three minutes. If it falls rapidly—that is, two or three degrees in five or six minutes—as soon as the fall has reached  $103^{\circ}$  F., remove your patient from the bath; if it falls slowly, as soon as it reaches  $101^{\circ}$  F. he should be removed and immediately placed in bed. Never keep the patient in the bath until the temperature shall have reached the normal standard; should you do so, he may pass from a condition of fever into a state of collapse, as the temperature continues to fall for some time after his removal from the bath. While in the bath, cold should be applied to the head by means of a sponge wet in cold water or by an ice-bag.

The cold pack is much less effective than the bath; but if the patient is too feeble to be moved, it may be employed with benefit. You should

wrap the patient in a sheet wrung out of tepid water, and over this sheet apply one wrung out of cold water. The latter may be removed as often as it becomes warmed; its application and removal may be continued until the desired fall in temperature shall be obtained.

In severe cases, during the first and second weeks, you will find that after the temperature has been reduced by the application of cold to the surface, it will begin slowly to rise until it reaches its former height. Usually one to three hours will elapse before it begins to rise, and from two to six before it reaches its former height. You will then be obliged to repeat the baths or packs, and to continue their use, both day and night, from three to six times during the twenty-four hours, if you expect to keep the temperature below 103° F. and accomplish anything by this plan of treatment. My experience in the use of cold applications leads me to believe that unless you are able to maintain a low range of temperature after four or five baths, you gain very little by their continuance. In other words, if, after using the baths for twenty-four hours, the temperature of your patient rapidly rises to the same or a higher degree than it was before their use was commenced, you will obtain little or no benefit from their continuance unless you can introduce some other agent which shall maintain the low temperature reached by the bath. I am also convinced that after the second week of typhoid fever, cold baths should not be employed to reduce temperature, for by their continuous use after that period they may do great harm. The condition of a typhoid patient during the first and second week of the fever is very different from that during the third and fourth week. During this latter period there is great danger of collapse after a cold bath, and in several instances I am confident that pulmonary complications have been the result. In a few instances the temperature can be very rapidly lowered by the application of ice-bags to the abdomen. The rapidity with which the temperature can be reduced usually depends upon the severity of the fever. In some cases, when the patient is placed in the cold bath, the temperature immediately begins to fall; in other cases there will be a gradual reduction of temperature as the water is made cooler. In certain severe cases, you may keep a patient in a bath of the temperature of 60° F. for the space of half an hour, without the temperature falling a degree. These cases are exceedingly grave in character, and you should use the bath with great care.

Finally, let me impress upon you that in typhoid fever, in order to reduce the temperature, you must not indiscriminately apply cold to the surface of the body. Perhaps there is no remedial agent which requires greater care in its use; yet doubtless, when judiciously em-

ployed, the lives of many typhoid patients may be saved, and it is equally certain that when injudiciously employed, many lives may be destroyed. If you use the cold baths in conjunction with other means for reducing temperature (concerning which I will speak at my next lecture), I am confident you will accomplish much; but if you rely only upon the baths, in the majority of instances you will be disappointed in the result. At the present time it seems to me, that by some, the benefit and power of cold baths in the treatment of typhoid fever have been overrated.

The general condition of your patient, and the stage of the fever must be considered; also the effects of the first few baths must be carefully noted.

Should a patient's temperature range at 104° F. or 105° F., there is no positive evidence that you must resort to a cold bath, or that a cold bath is the best agent to be employed for its reduction. Again, if the patient after the second or third bath is more quiet, has less delirium (if delirium previously existed), if his breathing becomes easy and natural, if the heart's action is more regular and forcible, and he falls asleep and perspires, there can be no question in regard to the beneficial effects of the bath. If, on the other hand, the bath is followed by feebler heart's action, by dusky cheeks, by rapid respiration, and by coldness of the extremities, from which condition the patient rallies slowly and imperfectly, you may be certain that however high the temperature may range, you will do harm by continuing the baths. When the extremities are cold, or there is profuse hemorrhage from the bowels, or when from any cause, there is great feebleness of the heart's action, and especially in the case of aged persons, cold baths are contra-indicated.—*New York Medical Record*.

#### CASE OF DISLOCATION OF THE HIP REDUCED BY THE USE OF THE FULCRUM.

By J. H. POOLEY, M.D.

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In the April and September numbers of the *American Practitioner* for the present year, I was very much interested in two short communications by Dr. George Sutton, Aurora, Ind., on the use of the fulcrum in the reduction of dislocations of the hip. The principle there advocated struck me as being sound and rational, as well as exceedingly simple, and the illustrative cases seemed very convincing. I determined upon the first opportunity that should occur to put it to the test of actual trial, and having done so I am more than ever convinced that it is a most valuable addition to our resources in dealing with this sometimes very troublesome class of injuries. And as every actual trial of a new

expedient in surgery is of value in settling the usefulness of the proposed improvement, and as I feel it to be due both to the profession and to Dr. Sutton, that, for a time at least, all the cases in which his method is employed should be recorded, I publish the following account of my case :

October 19, 1876, I was requested by Dr. A. Dunlap, of Springfield, Ohio, to see, in consultation with him, a case of dislocation of the hip, in which he had failed to effect reduction after a fair and repeated trial of the ordinary method of manipulation. The patient, the wife of a farmer residing near Catawba, Clarke county, Ohio, about fifteen miles from Springfield, had been thrown from a wagon the day before—October 18th—about four o'clock in the afternoon, and sustained a dislocation of the left hip. She had been first seen by Dr. John Clarke, of Mechanicsburg, who had been unsuccessful in his attempts at reduction. Dr. Dunlap had then been sent for, and had made repeated attempts to reduce the hip, but also without success. All these attempts had been by manipulation; pulleys had not been used.

I arrived at the house early on the morning of the 20th, about three o'clock. I found the patient—a spare, nervous woman of thirty-three—in bed suffering considerably from pain, and severely from nausea, the result of chloroform which had been administered on several occasions.

The left limb was an inch and a half shorter than its fellow, the foot very slightly everted, and the head of the bone could be plainly felt in front of the ilium, just above the acetabulum. Dr. Dunlap informed me that the dislocation had been primarily on to the dorsum ilii, and the present position of the head of the femur was the result of the last manipulation. It had been found, on manipulating it, to be extraordinarily movable, and had been carried once or twice into the thyroid foramen, and also up on the ilium just above the acetabulum, in which situation I found it. In fact it would go almost anywhere except into the right place. Dr. Dunlap said that he had carried it right across the acetabulum on two occasions, and as he did so, he felt a distinct crushing crepitus, but it went over, and not in. His belief, which I presume was correct, was that a portion of the lip of the acetabulum was broken off, and as the head of the thigh-bone was brought up against this broken portion, it was forced before it, and partially filling up the acetabular depression, prevented it from going in, and guided it over on to the other side instead.

I directed, according to Dr. Sutton's plan, a firm cylinder to be made, by tightly and evenly rolling two sheets, which was three inches in diameter, and about two feet in length; it was firmly tied round with narrow strips of bandage to prevent it unrolling. The patient was now anæsthetized

with a mixture of alcohol, chloroform, and ether, and laid upon a firm, narrow mattress, laid upon the floor. The cylinder, prepared as described, was now placed across the upper part of the thigh in the groin, and firmly held at each end by an assistant; over this, as a fulcrum, Dr. Dunlap made the manipulations, while I attempted to follow the excursions of the bone with my fingers. Drs. Clark and Newcomb, of Mechanicsburg, Drs. Beach and Hunter, of Catawba, and Dr. C. W. Dunlap, were also present and assisting. The first two attempts failed as I very plainly saw, from not fully carrying out the principle involved in the use of the fulcrum; that is by abducting the knee before complete flexion of the thigh over the cylinder had been accomplished. The first time the head of the femur lodged in the thyroid foramen; the second time at the top of the ilium, where it was when we began; it had skirted round the base of the acetabulum, without rising to its level, much less going into it.

The trial, in which the principle of the fulcrum was deliberately and thoroughly carried out, was perfectly and speedily successful. The thigh was slowly and fully flexed on to the abdomen over the fulcrum, the head of the bone was lifted up to the level with the acetabulum, and when the knee was abducted, and the motion of bringing the thigh down barely commenced, it slipped in with a distinct snap; the limb was found to be restored in length and position, and the dislocation was reduced. A broad, firm, pelvic bandage was applied, and the patient returned to bed.

This may almost be looked upon as a test case for the new method. Ordinary manipulation had been tried by skilful hands, in which it had never before failed; and I think that there can be little doubt that Dr. Dunlap's explanation of his failure was the correct one. What was wanted then was some means by which the head of the femur could be carried up to a level with the top of the acetabulum, and thus prevented from pushing the broken acetabular rim before it; this was found in Dr. Sutton's method, the obstacle was overcome, and the reduction accomplished.

It seems to me, therefore, that we are indebted to Dr. Sutton for a valuable improvement; and I do not know a more beautiful and philosophical piece of practical surgery, than the reduction of a dislocated hip by Rei's manipulation performed over Sutton's fulcrum.—*American Practitioner*.

#### LECTURE ON EYE DISEASES AND INJURIES.

*Nature's Protection to the Eye.*—The provision made by Nature for the protection of the eye from injury is of so perfect a character that it is not as much subject to serious lesions as might be expected; and when we consider how vul-

nerable to attack, how easily destroyed by slight injuries, and how vitally essential to the efficient working of the human machine the eye is, our admiration of the means provided for its protection is enhanced. Though the eye must necessarily be presented to all attacks, and used directly in all manual processes, and is thus, under all circumstances, placed in the most likely position for injury, it is relatively but seldom that it sustains a destructive injury, and it enjoys comparative immunity from the extensive lesions which every day present themselves as the result of blows about the face. The lightning speed of this warning from the eye to the brain and back again to the lid-muscles is almost inconceivable.

You must have observed this fact for yourselves, for in the daily run of hospital injuries all parts of the face and head seem to suffer more than the eye, though it is usually the object selected for attack.

Let us consider what it is which affords so sure a guard to the eye.

In the first place, the strong orbital ridges of the frontal, malar, and maxillary bones, effectually bear off blows from any body larger than the eye itself; while the eye keeps guard, and by giving the signal for a rapid jerk of the head, and the involuntary and spasmodic closure of the lids, protects the globe from the access of smaller bodies. A remarkable instance of this has been recently noted in the medical journals. A chemist was examining a small bottle of explosive liquid between his eye and the light, at half arm's length. By a shake the liquid exploded, and the fragments of the bottle and its contents were violently scattered. On recovering from the shock of the explosion, which was so violent as to blow him off his feet, the chemist at once felt that his face and lids were severely burned. To his great relief, he found, however, that his eyes were perfectly safe, the small fraction of a second which the contents of the bottle occupied in traversing the distance from hand to eyes, had sufficed for the retina to receive its impression, to transmit the signal to the brain, and for the brain to issue its order to the orbicular palpebrarum, which closed tightly in compliance. That this latter protection is of great importance is proved by the frequent occurrence of accidents to one eye, when the other has been previously lost.

With lightning speed the retina transmits to the brain its warning of danger. By an instantaneous, almost convulsive and involuntary movement the head is removed from the direction of danger, and the eye is tightly covered by the lid; even if the blow or missile take effect in the exact direction of the eye, the whole force is sustained by the anterior arches of the orbit, if it be too large to penetrate within the cavity; and if sufficiently small to enter, it meets with nothing on which to expend its force, except a hard light, slippery globe, resting on a cushion of fat, and

free to escape in any direction from the pressure.

The lashes, also, acting as a sort of grating or sieve, entrap all sorts of minute objects, which, should they, in spite of all these protections, obtain an entrance, are met by an instantaneous deluge of tears which carries them away before they can inflict any injury.

In addition to these extrinsic protective provisions, the eye derives its greatest security from its own perfect mobility, and the elasticity of the cushion of adipose and cellular tissue on which it rests, and from the extreme strength of the sclerotic; so that, while the body of the eye itself will bear almost any amount of violence from a blunt or rounded missile, the structures on which it rests will receive without injury the greater part of any shock which may be communicated to it. The every-day proof of this fact is, that amongst the thousand black eyes given and received, rupture of the eyeball is a rare accident.

*Ecchymosis beneath the Conjunctiva.*—Proceeding now to the injuries of the eye-ball itself, and to some of the consequences therefrom, I present to you, firstly, an illustration of an ecchymosis beneath the conjunctiva (Fig. 1), with the appearance of which it is necessary that you should be familiar, as you may easily be deceived respecting the gravity of the accident by the very alarming appearance which the eye presents. Sub-conjunctival ecchymoses are more usually caused by a slight scratch than by a heavy blow, and are very commonly the result of great straining on the part of the patient, either in coughing or retching, especially those who are in the anæmic condition which encourages small hæmorrhages under the skin, and in such cases there need be no injury at all. In this way ecchymoses are frequently observed in cases of purpura, and occasionally in Asiatic cholera. The effusion of blood beneath the conjunctiva may be distinguished from any other form of vascularity—

a. By its brilliant uniform scarlet, velvety surface, when recent, which completely hides the sclerotic.

b. By the absence of any visible blood-vessels.

c. By the irregular ragged edge.

It may be so large as to occupy the whole sub-conjunctival cellular tissue, and to raise up the conjunctiva into folds, or it may amount to no more than a small scarlet spot on the sclerotic. It never invades the corneal conjunctiva, because the attachments of the conjunctiva to the anterior elastic cornea are much closer than those which connect it with the sclerotic.

*Treatment.*—Surgical interference for sub-conjunctival hæmorrhage is neither necessary nor effective. If the patient will wait, the ecchymoses are best let alone, and they will go through the sequences of colour usual in the case of a black eye, until they finally disappear in eight



or ten days. If the effusion be excessive in any one spot, the conjunctiva may, without fear of mischief, be divided, and the blood squeezed out; and if a patient be impatient for restoration of good looks, a lotion may be prescribed to aid absorption.

The following is the formula which I have used, but I do not claim for it any very decided effect:—

℞ Potass. iodid., ʒij;  
Tr. Arnica montan., ʒjss.;  
Aq. rosami, ad., ʒj;

p. lotio.

The following collyrium, though inelegant, is more effective:

℞ Ol. jecor asel., ʒj;  
Pot. iodid., gr. v;  
Iodinii., gr. j.

p. collyr.

Compression is a very useful procedure, when it is desired to effect absorption, and a compress of lint soaked in an unirritating lotion of iodide of potassium, and bandaged tightly on the eye will be suitable in the treatment of persons who can adopt it.

*Lacerations of the Conjunctiva.*—Conjunctival lacerations are very common, and usually quite unimportant in their effects. The eye is watery looking, and the secretion of tears increased; the conjunctiva may also be slightly injected, the patient complaining of feeling as if a grain of sand was under the lid, or a hair turned in upon the eye. There is usually some difficulty in finding the situation of the laceration, on account of the transparency of the conjunctival fold.

*Treatment.*—If the laceration be small it will be sufficient to keep the lid closed, and apply a cooling lotion externally. If very large, it will be necessary to place the edges of the wound as nearly as possible in apposition and introduce a couple of the finest silk sutures, closing and bandaging the eye afterwards to prevent motion.

*Burns of the Conjunctiva.*—The conjunctiva may be the subject of extensive destruction by burns—the most common forms of the injury being from gunpowder, from quicklime, and from sulphuric acid in cases of vitriol-throwing. Of these, the burn by lime is that which more especially affects the conjunctiva, while the injuries by gunpowder and vitriol usually involve the whole eye, and frequently end in its destruction. I have also seen eschars of the conjunctiva from a splash of whisky thrown in the face, and such burns have seemed to me much more severe than the strength of the spirit would seem to account for, whence I conclude that the cheap fiery liquids sold in low public houses must contain something—perhaps capsicum—more irritating than pure spirit.

*Injury of the Eye by Lime.*—This form of injury, which is beautifully depicted by the late Mr. Wardrop in his work on the eye, from which I have copied the illustration, is common

amongst bricklayers' labourers, in consequence of the ebullitions which take place in the hasty slacking of lime, and which are sometimes strong enough to splash the lime into the eye. However happening, the injury is very dangerous, and the more so because the effect of the caustic alkali is rapid, and the patient is seldom seen until much mischief is done. The first effect of pure lime is to disintegrate or burn the entire conjunctiva wherever it lodges, and even to destroy the corneal surface in the same way. If the lime only lodges in spots, those parts of the conjunctiva will suffer and the remainder escape, because the lime being insoluble does not spread to any serious extent, and, moreover, the process of slacking absorbs all the tear-water, and the deposit is, therefore, not washed away. Commonly, even when the lime is in the form of mortar, the conjunctiva is removed from the entire cornea, which then appears as a dull opal-coloured surface surrounded by the chemosed conjunctiva, and appearing as if buried in a pit in the surrounding vascular tissues. Vision is almost *nil*, the pain violent, but of a smarting rather than an aching character, and the flow of tears excessive. If the conjunctiva be burned off only in patches these places will appear as shallow depressions usually with the cake of lime adherent to their bottoms.

*Treatment.*—The first indication is to remove the lime very thoroughly, which, in consequence of the closeness of its adhesion, is a troublesome and painful proceeding. The eye-lids should be fully everted, all that can be removed by a camel's hair-brush taken off, and all that cannot, picked away by forceps or even dug out if necessary with the needle or Walton's gouge. The deepest part of the conjunctival fold often contains a quantity of the lime, which may be overlooked if not searched for. When the large portions are removed, the surface should be syringed with weak vinegar and water, which will form with the remaining small particles an innocuous acetate of lime. The removal of the lime having been completely effected, a drop of atropine should be instilled, and then a couple of drops of fine oil or sweet glycerine and the lids closed. Astringents, such as weak nitrate of silver solution and sulphate of zinc are sometimes recommended, but I have found them very irritating in such cases and worse than useless. Acetate of lead lotions must be specially avoided, as they will deposit a coating of insoluble chloride-carbonate and albuminate of lead in the ulcerated surface, which will heal in and remain as a permanent stain. According to the extent of the injury, the subsequent treatment must be directed to allay inflammation. Cooling lotions externally will be suitable in slight cases, those more severe will require leeching to the temple and poulticing.

*Effects.*—If burns of the conjunctiva be superficial and not involving the whole thickness of



the membrane, the damage will be quickly repaired by the reproduction of epithelium, and no perceptible scar will remain. Mr. Lawson in his works on "Injuries of the Eye" says:—"If the injury extends deeper than the epithelium, so as to include the connective tissue in which it rests, the whole thickness of the mucous membrane will be destroyed and a slough will form, which will slowly separate before any attempt is made to repair the gap. When such complete destruction of the part ensues, the space is not filled up by a growth of new tissue, but the wound is gradually closed by a drawing together of its sides and a contracted cicatrix is formed." This statement is accurate when applied to extreme cases, but it must not be assumed that contraction and adhesion of the lids will occur in all cases in which the conjunctiva is totally destroyed, for I have seen more than one case of lime-burn in which the cornea seemed absolutely bare, and which, nevertheless, received a fresh conjunctival covering after a few weeks. The special danger of deep burns of the conjunctiva—especially those which involve the palpebral as well as the ocular conjunctiva—is the occurrence of symblepharon or adhesion of the ulcerated surfaces in the act of cicatrization. Frequently, the adhesions are more extensive and irremediable, and the attention of the surgeon must be devoted as much to prevent them as to allay inflammation or restore sight. In these cases of lime-burn—especially when the lime has been but partially slacked before it enters the eye—it is unfortunately but seldom that the injury is restricted to the conjunctiva. Very frequently the cornea is burned, sometimes even to the greater part of its thickness, and a slough is the result, with partial or entire destruction of the eye. In treating these cases, the lids must be separated each day, in order to prevent adhesions of the conjunctiva to the ocular globe, and the greatest injury is commonly done by uneducated people, who bandage up the eye and leave it so until the pain and discharge abate.

When the eye is opened, the sloughs if there be any, should be lifted off, and the surface cleaned with a syringe, and if there seem to be a tendency towards adhesion and contraction—which is most commonly found in the sinus of the lower lid—a small slip of lint may be placed so as to separate the approximated parts. Local applications introduced between the lids must be emollient, such as sweet oil or fresh glycerine. If astringents be admissible I think *vin. opii* is the most advantageous. It will be readily understood that, inasmuch as the slough must be cast off, it is better to aid their elimination in every way, and there will be no use depleting the patient to avert inflammation which will be more properly dealt with as it arises.—*Dublin Medical Press.*

## IODOFORM FOR BURNS.

Dr. Bedford Brown, in a valuable article on "The Pathology and Treatment of Burns," in the *Philadelphia Medical Times*, says that of all local treatment he prefers iodoform, in the following formula:—

|                     |        |
|---------------------|--------|
| R Iodof.....        | 3 ij.  |
| Ung. cetacei.....   | 3 j.   |
| Ext. conii .....    | 3 jss. |
| Acid. carbolic..... | gt. x. |

This, spread on fine linen, is applied twice daily to the inflamed surface, which is then enveloped in oiled silk, no other dressing being required. If there is great dryness of surface from destruction of vitality and want of exhalation, the wound, before applying the ointment, should be coated with the common linimentum calcis, which affords a soft and moist dressing, and in no wise interferes with the action of the iodoform. The iodoform acts as a certain and most effective sedative on the painful and exposed surface, and at the same time as an antiseptic. It reduces inflammation and suppuration, when in excess, in a remarkable manner, promptly converting a most painful and irritable wound into one that is comparatively painless. It is also an excellent promoter of healthy action and healing process, and has, besides, the great advantage of rendering the use of anodynes unnecessary.

We may add, apropos of the external use of iodoform, that, according to the *Doctor*, ethereal solution of iodoform may be brushed on any surface. The coat of iodoform left is odorless—a great advantage in cases where the peculiar smell of the drug is objected to.

## PLAIN DIRECTIONS FOR PREVENTING THE SPREAD OF INFECTIOUS DISEASES:

Small-Pox, Scarlatina (Scarlet Fever), Measles, Typhus Fever, Enteric (Typhoid or Gastric) Fever, Hooping Cough, Diphtheria, Etc.

By J. M. MACLAGAN, M.D., Medical Officer of Health for Hexam and Haltwhistle Unions Rural Sanitary Districts, Etc., Etc.

*General Directions.*—I. When a case of infectious disease occurs in a house, immediate notice thereof should be given to the Medical Officer of Health or to the Inspector of Nuisances, and medical advice at once procured.

The following precautions should be taken

1. *Isolate the person affected as much as possible from the other inmates of the house.*

This is most readily affected by at once removing him to an upper room, if circumstances permit. The room selected should be large and airy, and the means of ventilating it, which shall be presently mentioned, at once adopted.

2. Before removing the patient, the following preparations ought to be made in the room:

All superfluous curtains, carpets, woollen articles, unnecessary clothing—in short, everything likely to retain infection, should be at once removed.

3. The patient's bed ought to be so placed as to allow of a free current of air around it, but not so as to place it in a draught.

4. The room must be kept well ventilated, under the physician's direction, by means either of a fire (when required) or of an open fire-place and chimney, and of windows opening to the external air. By means of the latter, ventilation is most effectually procured, so as to avoid draughts, in the following manner:

Raise the lower sash of the window three or four inches, then procure a piece of wood made to fit accurately into the lower opening, and place it there. By these means free outward and inward currents of air—without causing any draughts—are obtained through the vacant space between the two sashes. When a window is merely opened from the upper or lower sash, draughts are invariably caused.

5. Placing a small sheet of oil-cloth, mackintosh, or other waterproof material, beneath the upper blanket on which the patient is to rest, effectually prevents the bed from being soiled by any discharges, etc.

II. After removal of the patient to the room in which he is to remain, the outside of the door and door-posts should be completely covered by a sheet kept constantly wetted with some disinfecting fluid, such as *Burnett's Solution*, *Condy's Fluid*, *Carbolic Acid*, etc.

2. The room must be kept scrupulously clean. Before being swept, which should be done daily, if possible, the floor should be sprinkled with *Culvert's* or *McDougall's Disinfecting Powders*, or with a weak solution of one of the disinfecting fluids already mentioned.

3. Vessels containing disinfecting fluids should be placed in the room for the reception of all bed and body linen, towels, handkerchiefs, etc., immediately on being removed from the patient, and on no account should they be washed along with other household articles.

4. Disinfectants should also be placed in all the chamber utensils used by the patient, and, after use, more disinfecting fluid should be added, and the whole contents, if possible, should be immediately buried. No chamber vessel should be allowed to remain in the room after having been used.

5. All plates, cups, glasses, etc., which have been used by the patient, should be rinsed with some disinfectant before being washed; and on no account should any vessels used in the sick room be washed along with other things, unless previously thoroughly disinfected.

6. Attendants on the sick should not wear woollen dresses, but only those made of washing materials.

7. Basins containing water, to which some

disinfectant has been added, should always be at hand for the benefit of the attendants on the sick, who should not be sparing of their use.

8. No article of food or drink from the sick room should be consumed by other persons.

9. Visitors to the sick room, except in the case of clergymen and medical men, should be peremptorily forbidden; and they, when necessarily present, should, on leaving, wash their hands in water to which a disinfectant has been added, and should have as little immediate communication with others as possible.

III. When a death from infectious disease occurs, the body should be at once placed in a coffin and sprinkled with some disinfecting fluid or powder, such as *chloride of lime*, etc., and buried with the least possible delay.

2. On no account whatever should it be allowed to remain in a room occupied by living persons.

IV. On the termination of a case of infectious disease, either when the patient is pronounced free from infection, or, in the event of death, after removal of the body, the sick room and its contents should be thoroughly cleansed and disinfected.

2. The bed and bedclothes, and all wearing apparel used by the attendants or patient, should be thoroughly disinfected.

V. In houses where a case of infectious disease occurs, no washing, tailoring, dressmaking, nor any similar occupation ought to be carried on.

2. No milk or food of any kind should be supplied from infected houses.

3. Children from infected houses should not be allowed to attend schools, and all persons from infected houses should have as little communication as possible with others either in private houses or in public places, such as railways, omnibuses, public-houses, churches, etc.

4. Any accumulation of filth or refuse of any kind should be at once removed from or about the premises, and disinfectants freely used. If this cannot be done by the persons themselves, immediate notice should be given to the *Inspector of Nuisances*.

5. The existence of nuisances of any kind and wheresoever situated should be at once reported to the *Inspector of Nuisances*.

VI.—During the prevalence of epidemic, infectious or contagious diseases, it becomes specially important that the general laws regarding the preservation of health should be rigidly attended to.

2. Implicit trust should not be placed in so-called "disinfectants." They are very useful when judiciously employed, but are by no means certain "preventives of disease."

3. Pure air, pure water, warm clothing and good food should always be obtained if possible. By their constant use less chance is afforded for an invasion of disease.

4. Temperance both in eating and drinking is

essential for the maintenance of health and the prevention of disease.

5. *Overcrowding* in houses, workshops or schools should be strictly prohibited.

6. All houses, cottages, schools and public rooms should be kept clean and well ventilated; and frequent use of lime-washing on the walls and ceilings should be made.

*Special Directions.*—I. *Scarlatina* and *Scarlet Fever* are one and the same disease. It is very infectious. A very *mild* case may give rise by infection to a very *severe* one. Infection is contained in all discharges from the body during the progress of the disease and recovery; but more especially from the skin during convalescence, and when the cuticle is being shed. The dry particles which are separated from the skin are highly infectious, and retain their infectious nature for an unknown time, unless thoroughly disinfected. They are disseminated through the air, and become attached to articles of furniture, clothing, draperies, and wall papers, etc. Thus the disease may readily be conveyed from one person to another by those who are not themselves suffering from it. It is also conveyed, as has been mentioned, by bedding, clothing, furniture and other articles, and by rooms which, having been exposed to infection, have not had their floors, ceilings, or walls disinfected, or had the wall papers removed.

No child should be permitted to go to school from an infected house, and communication of such in play or otherwise with healthy children should be prevented.

When a person has had the disease, he should not be permitted to mix with others until he has perfectly recovered and has had his clothes thoroughly disinfected; and not even then without the permission of his medical attendant. Nor is it advisable that any one who has had the slightest communication with a person suffering from the disease should go to any church, meeting, public-house, fair, or market, etc. Neglect of these precautions is a prolific cause of the spread of this disease.

Attendants on persons suffering from *Scarlatina* should be chosen, if possible, from those who have already had the disease.

"It is believed that the dispersion of contagious dust from the patient's skin is impeded by keeping his entire body (including limbs, head and face,) constantly anointed with oil or other grease; and some practitioners also believe this treatment to be of advantage to the patient himself. When the patient's convalescence is complete, the final disinfection of his surface should be effected by warm baths, with abundant soap, taken on three or four successive days (under the direction of the medical attendant), till no trace of roughness of the skin remains. After this process, and with clean clothes, he may be deemed again safe for asso-

ciation; but, previously to this, however slight may have been his attack, he ought always to be regarded as dangerous to persons susceptible of *Scarlatina*."—Mr. SIMON, *Medical Officer to Privy Council*.

II. *Small-Pox*.—Infection from this disease is contained in all matters passing from the patient—in the breath and from the skin, in the matter contained in the "pocks," and in the dried scabs of the latter.

Vaccination, carefully and efficiently performed, is the only means of preventing or modifying this disease, and by it an almost certain immunity from death by this disease is conferred. No doubt cases do occur after vaccination, but they are milder in character than those occurring in the unvaccinated. After several years' interval, *re-vaccination* ought to be had recourse to; and whenever the disease is present as an "epidemic," every person should be vaccinated, whether he has been so previously or not; and at such times all *unvaccinated children*, whatever may be their age, if in a fit state, should be vaccinated without any delay.

*There is nothing which has been more certainly proved than the fact that vaccination saves annually thousands of lives, and therefore no attention ought to be given to those ignorant and foolish persons who are constantly circulating absurd ideas regarding it.*

Persons attending on patients suffering from small-pox, should themselves have had the disease, or should recently have been re-vaccinated.

III. *Enteric (Typhoid or Gastric) Fever*.—The mode in which infection is chiefly spread in this disease is by the poison contained in discharges from the patient's bowels, and lasts certainly as long as these discharges continue to be unnatural. It is believed, however, by some, that this disease is infectious in other ways. These discharges infect the surrounding air, the bed and body linen, and also all places used for their reception. Thus, if placed in a water-closet, cesspool, drain, privy, or ashpit, the sewers of a town or village, and through the drains of houses, may, under certain circumstances, be the means of disseminating the disease. When drains into which these discharges have been thrown pass near to wells, the water contained in the latter has frequently been found to be perfectly unfit, indeed dangerous, to use. By faulty construction of such drains, soakage is frequently caused either into wells or into the surrounding ground, rendering them directly the means of spreading the disease. Cisterns may become contaminated by having their overflow pipes terminating in drains: and even water supplied by a water company may become infected by gas being drawn into defective pipes during an intermittent supply.

*Milk* has frequently been found to be a fruit-

ful medium for conveying the disease, either from having been placed in infected air, from which it has absorbed the poison, or from *milk-pails* having been washed, or the milk adulterated, with water containing the infection.

*Great care should therefore be taken as to the source of the household milk supply.*

The most certain and most deadly manner in which the poison of *enteric fever* is conveyed is by contaminated drinking water. The most certain way of preventing this contamination of water is by immediately destroying the poison contained in the discharges as soon as they are passed by the patient.

Disinfectants should be placed in the chamber utensil before use; and immediately after being used more disinfectant should be added. Above all things, the use of disinfectants should be frequent and copious.

The patient ought also to expectorate into a vessel containing some disinfectant.

All sheets, towels, handkerchiefs, &c., which have been used by the patient should be thoroughly disinfected, and afterwards carefully washed.

In all cases of infectious disease, it may be as well that the patient use rags or pieces of old linen, &c. (in lieu of pocket-handkerchiefs), which may afterwards be burned.

When the bed or body linen is soiled, the soiled spots should be sprinkled with some disinfecting powder.

A small sheet of gutta-percha, mackintosh cloth, or other water-proof sheeting, placed below the upper blanket under the patient's body, effectually protects the bed from discharges, and is especially useful in this disease.

After the performance of any duty about a patient, the attendants should wash their hands freely in disinfected water.

The discharges should *never* (if it can possibly be avoided) be placed in a privy or water-closet, but should, after complete disinfection, be buried deeply in the ground, at a distance from any drain, well, or watercourse. On no account should they be thrown on to any ashpit or dung-hill, nor into any cesspool.

IV. Other Infectious Diseases.—It is quite unnecessary to prescribe special rules for the prevention of the spread of *Typhus Fever*, *Measles*, *Diphtheria*, *Whooping Cough*, &c. The general directions given are sufficient guides as to what is necessary in cases of those diseases. Many recommendations might be made regarding them, but these belong more to the duties of the medical attendant than to the Medical Officer of Health, and therefore are omitted here.

*Directions for Disinfecting Rooms.*—Rooms which have been occupied by a person suffering from *infectious disease* should, on the termination of illness, be at once disinfected. To effect this thoroughly, all crevices round windows

and doors and the fireplace should be closed by pasting pieces of paper over them. Lumps of sulphur (brimstone), one pound for every thousand cubic feet of space, should then be put into a metal dish, placed by means of tongs over a bucket of water. This being set fire to, the doors should be closed, and the room should be allowed to remain without interference for three or four hours. After this time the windows should be thrown open, and when the fumes have disappeared, all the woodwork and walls should be thoroughly washed with soft soap and water, to which *carbolic acid* has been added (one pint of the common liquid to three or four gallons of water), and the paper from the walls stripped off. In whitewashed rooms the walls should be scraped, and then washed with hot lime, to which *carbolic acid* has been added. The windows should then be kept open for thirty-six or forty-eight hours.

*Directions for Disinfecting Clothing.*—The best mode of effecting this is by the agency of *great heat*, and when this is possible no other plan need be tried. Unless, however, there are places built on purpose, this agency is hardly procurable. Failing this, *boiling* clothes in water to which some disinfectant has been added should be employed. *Carbolic acid*, one part of pure, or two parts of commercial acid to one hundred parts of water, is sufficient.

Woollen clothing cannot be treated in this manner, but must be exposed for some time to the fumes of *sulphur*, and afterwards freely exposed to the action of the sun and wind. Other methods of disinfecting linen and other washing materials may be used.

One gallon of water containing two ounces of *chloride of lime*, or one fluid ounce of the solution of that substance or of *Condy's Fluid*, or four ounces of common *carbolic acid* solution, may be used. In this the clothes should be steeped thoroughly, and afterwards placed in boiling-water, or simply boiled. If *Condy's Fluid* be used, the clothes should be merely immersed, and not allowed to remain for any time, otherwise they will be stained, but they must be rinsed in clear water. If any other disinfectants can be readily had, it is better not to use *Condy's Fluid* for this purpose.

*Directions for Disinfecting Discharges of persons Suffering from Infectious Diseases.*—There are several disinfectants which may be used for this purpose.

1. Two pounds of *sulphate of iron* (copperas or green vitriol) dissolved in one gallon of hot water, may be used either hot or cold.

Half a pint or so of this solution should be placed in all chamber vessels likely to be used by the patient when empty, and the same quantity should be poured over the contents after use.

2. Quarter of a pint of *Calvert's Liquid Car-*

*bolio Acid* in one gallon of water may be used in the same manner.

3. A like quantity of *Sir Wm. Burnett's Disinfecting Fluid*, or,

4. Of *Condy's Fluid*, may be similarly employed.

*Directions for Disinfecting the Hands of Attendants.*—After any duty connected with a patient suffering from *infectious disease*, the hands of attendants should always be put into one of the above solutions, prior to being washed in clear water.

*Directions for Disinfecting Privies, Ashpits, Water-closets, Drains, or any Offensive Places.*—Two or three pounds (according to circumstances) of *sulphate of iron* (copperas or green vitriol) dissolved in a gallon of water, may be thrown into the place requiring disinfection, in quantities of one quart or upwards, according to the necessities of the place, and repeated so long as offensive odors exist.

*Carbolic Acid, Burnett's Solution, Condy's Solution, Calvert's or McDougall's Powders, and Cooper's Patent Salts* (the latter are inexpensive and not dangerously poisonous disinfectants), may all be used, either separately or in conjunction, for this purpose. All these articles when sold have full information regarding the quantities necessary for different purposes given with them.

It must be remembered that most of these disinfectants are very poisonous, therefore great care in their employment must be taken. They should be kept entirely out of the reach of children, should not be put into bottles or receptacles generally used for other things, and should invariably have a "Poison" label attached.

With regard to the employment of *disinfectants*, it should be distinctly understood that they are merely *aids* in preventing the spread of infectious diseases, and that they must not by any means be trusted too entirely for that purpose.

In the event of *sewer gas*, continued *offensive odors*, or *constant sickness* occurring in a house, proper workmen should be obtained in order to see if any structural defects exists in sinks, drains, water-closets, privies, &c. If such should exist, disinfection merely will be of no avail.

#### GENERAL DIRECTIONS FOR THE PRESERVATION OF HEALTH.

I. *HABITATIONS.*—All dwellings should be free from dampness, be freely ventilated, and have abundance of daylight.

1. "*Overcrowding* in houses is very injurious to health. Any house or part of house, so overcrowded as to be dangerous or injurious to the health of the inmates, whether or not members of the same family, shall be deemed a nuisance,

liable to be dealt with summarily in manner provided by the Act."—38 and 39 Vic., chap. 55, sec. 91.

2. *Cleanliness* is essential to the preservation of health. The ceilings of houses should be frequently whitewashed and the rooms freely swept and the floors washed.

3. *Fresh air* should be admitted into all bedrooms in the morning, by opening windows and doors. Bed coverings should be thrown down and exposed to the air for some time before the bed is made.

4. Chamber vessels should not be allowed to retain their contents and remain in any room longer than is absolutely necessary.

II. *CLOTHING.*—The body should be well covered. In winter or cold weather, flannel should be worn next the skin. In summer, if flannel be found too oppressive, some lighter fabric may be used, but this should invariably be *woollen*. Linen should be frequently changed.

III. *FOOD.*—Food should be plain, wholesome and fresh. Meals should be taken, if possible, at regular periods. Infants should have no other food than breast milk until the first appearance of teeth, when small quantities of light farinaceous food may be given in addition. If there is a deficiency of breast milk, cow's milk diluted according to circumstances with tepid water and a little sugar may be given. No child ought to be older than nine months before being weaned.

IV. *PURE DRINKING WATER* should always be used. No water which can be suspected of containing any contamination from sewers, privies or drains, should ever be used. Pure water should be clear, colorless and free from smell, but all such water is not necessarily pure, but may contain sewage, although it is bright and sparkling. All water should be filtered; but filtration will not separate sewage, but will only separate solid matters. A cheap filter may be easily made thus: Plug the hole of a flower-pot loosely with a piece of sponge, place a layer of powdered animal charcoal about one inch thick, then a like quantity of clean sand, and on that some coarse gravel. These should be frequently changed. The charcoal may be burned over again. It is a wise precaution, when any doubt exists as to its purity, to *boil* water before use.

V. *EXERCISE.*—A moderate amount of exercise should be taken daily.

VI. *MEDICINE* should never be taken except by the advice of a physician, unless under very ordinary circumstances. Persons who are perpetually physicking themselves are never in a healthy condition, either bodily or mental.

It would be quite impossible, and beyond the scope of these "plain directions," to give fuller directions for the "preservation of health." When in any difficulty, it is wise at once to consult a medical man.



## HOW TO CURE A COLD IN THE HEAD.

By Dr. DAVID FERRIER, Assistant Physician to King's College Hospital.

[We all know the miseries of a cold in the head, and the inconvenience arising from it. Dr. Ferrier having succeeded in arresting one with which he was threatened, by the treatment recommended, brings it under the notice of the profession.]

The symptoms being those of acute catarrh of the nasal mucous membrane, the treatment which seemed to me most likely to succeed was that which I have always found most efficacious in acute catarrh of the gastric mucous membranes. In the acute catarrh of alcoholism accompanied with profuse secretion of mucus, which is often vomited up in large quantities almost without effort, as well as in the more chronic forms of gastric catarrh, bismuth alone, or in combination with morphia, acts almost like a specific.

On the same principle the topical application of bismuth to the nasal mucous membrane seemed to me the plan most likely to be followed by beneficial results. I do not know whether the plan is absolutely original, but I am not aware of its having been adopted previously. This, however, is of no importance compared with the question of its efficacy. On the evening in question I began to suffer with the symptoms of cold in the head—irritation of the nostrils, sneezing, watering of the eyes, and commencing flow of the mucous secretion. Having some trisnitrate of bismuth at hand, I took repeated pinches of it in the form of snuff, inhaling it strongly, so as to carry it well into the interior of the nostrils. In a short time the tickling in the nostrils and sneezing ceased, next morning all traces of coryza had completely disappeared.

Bismuth alone, therefore, proved quite successful, but it is better in combination with the ingredients in the following formula. Bismuth by itself is rather heavy, and not easily inhaled, and it is, moreover, necessary that it should form a coating on the mucous membrane. It is, therefore, advisable to combine it with pulv. acaciæ, which renders the bulk larger and the powder more easily inhaled, while the secretion of the nostrils causes the formation of an adherent mucilaginous coating, of itself a great sedative of an irritated surface. The sedative effect is greatly strengthened by the addition of a small quantity of hydrochlorate of morphia, which speedily allays the feeling of irritation, and aids in putting a stop to the reflex secretion of tears.

The formula which I find on the whole the most suitable combination of ingredients of the snuff is as follows:—Hydrochlorate of morphia, two grains; acacia powder, two drachms; trisnitrate of bismuth, six drachms. As this is neither an errhine nor a sternutatory, but rather the opposite, it may be termed an anti-errhine or anti-sternutatory powder. Of this powder one-quarter to one-half may be taken as snuff in the course of the twenty-four hours. The inhalations ought to be commenced as soon as the symptoms of coryza begin to show themselves,

and should be used frequently at first, so as to keep the interior of the nostrils constantly well coated. Each time the nostrils are cleared another pinch should be taken. It may be taken in the ordinary manner from between the thumb and fore-finger, but a much more efficacious and less wasteful method is to use a small gutter of paper, or a "snuff-spoon," placing it just within the nostril, and sniffing up forcibly so as to carry it well within. Some of the snuff usually finds its way into the pharynx, and acts as a good topical application there, should there be also pharyngeal catarrh. The powder causes scarcely any perceptible sensation. A slight smarting may occur if the mucous membrane is much irritated and inflamed, but it rapidly disappears. After a few sniffs of the powder, a perceptible amelioration of the symptoms ensues, and in the course of a few hours, the powder being inhaled from time to time, all the symptoms may have entirely disappeared.

I am writing this note cured of a cold in the head which I began to manifest in a very decided manner last night—viz., weight in the frontal sinuses, tickling of the nostrils, sneezing, watering of the eyes, and commencing flow of the nasal mucus.

I commenced taking the snuff, continuing at intervals for about two hours, thoroughly coating the interior of the nostrils with it. Next morning I found myself entirely free from catarrh. The effects in my own case have been twice so rapid and beneficial that I look with comparative indifference on future colds. In the case of others to whom I have recommended the same treatment equally rapid and beneficial results have followed. One of my students in King's College Hospital described the effects as quite magical and unexpected, having in this way got rid of a cold in one evening. The other day one of the officials in King's College asked me if I could do anything to check a dreadful cold in the head which he had just caught. I gave him the above prescription, asking him to note the results. A day or two after he came and told me that I had given him very marvellous snuff, as he had not taken more than one-eighth part before he had got rid of all his uneasiness and discomfort. Though I have not yet had very many opportunities of trying this method of cure, the success so far has been such as to warrant my recommending it as a rapid and efficacious treatment of nasal catarrh.—*Lancet*, April 8, 1876.

[We should prefer to use this remedy without the morphia....Eds.]

## GALLIC ACID IN THE TREATMENT OF ALBUMINURIA.

By Dr. J. T. JAMIESON.

The following is from an article in the *American Practitioner*:—I wish to call attention to the use of gallic acid in the treatment of albuminuria as a sequel to scarlet fever, with which, in a few cases, I have met with marked success. My experience with the remedy has been as follows:—

In my first case, occurring in a boy aged about



twelve years, the symptoms were very severe. There was œdema of the face and lower extremities, but no effusion into the thoracic or abdominal cavities; violent headaché; blindness; there had been four or five strong epileptiform convulsions; urine was scanty and contained blood, resembling exactly water in which fresh beef had been washed, and coagulating about one-half on testing with heat and nitric acid. To relieve the cerebral symptoms, a blister was applied to the neck, sinapisms to the extremities and lumbar region, cold to the head, and two or three doses of a mercurial with bitartrate of potassa. This was followed by iodide of potassium and a teaspoonful of a saturated solution of gallic acid every two hours. The acid was given in this manner for five days and nights in succession, the patient rapidly improving under its use, and the urine becoming more copious and less bloody. It was continued for twenty-two days, only at longer intervals, and at that date the urine when tested manifested the slightest possible trace of albumen, although the boy at this time was around the house and apparently perfectly recovered, having been so for a number of days. The tinct. ferri. chloridi was given in small doses, and completed the cure.

My second case occurred in a girl about six years of age. The eruption was very livid and the skin had desquamated. The child recovered well from the fever, and was about the house. She went into a cold room to play with other children, and a day or two after the face became œdematous; there was pain in the head; slight fever; urine quite bloody, and on testing in the usual manner presented considerable coagulation. The patient was put upon a saturated solution of gallic acid, a teaspoonful every two hours. In seven days the urine was free from albumen and copious in quantity, and the child seemed well, with the exception of debility, for which the muriated tincture of iron was prescribed. About ten days after this, in consequence of fresh exposure to cold, there was a slight relapse, the urine becoming again bloody and the face puffed; but on resuming the gallic acid for a few days these symptoms speedily subsided and the recovery became permanent. In this case the gallic acid was administered unaccompanied by any other medicine, except an occasional dose of castor oil to regulate the action of the bowels.

*Remarks.*—The treatment hitherto generally adopted in this affection has been that of acting derivatively on the bowels by means of mercurials, followed by such diuretics as digitalis, sweet spirits of nitre, acetate of potash, &c.; but if future experience should confirm the efficiency of gallic acid, I cannot but think we shall possess a remedy superior to any of the above. The gallic acid if I understand its action aright, enters the blood unchanged, and unchanged is carried directly to the congested and inflamed capillaries of the secretory portion of the kidneys, acting as an astringent and tonic upon them, promoting their contraction, and thus arresting the exudation of red blood corpuscles and promoting the normal secretion of urine. I have

seen no unpleasant effects from its administration as freely as above represented. It does not disturb the stomach nor interfere with the appetite or digestion, but it does tend to constipate the bowels somewhat, rendering necessary the occasional use of a laxative.—*Medical Press and Circular.*

#### HOT WATER ENEMATA IN DYSENTERY.

In the *New York Medical Journal*, Dec., 1876, Dr. J. J. Reid recommends hot water injections in acute dysentery.

The method of administration is quite simple, and does not require the services of a skilled nurse, or extensive apparatus.

The hips of the patient are slightly raised, by means of a pillow, and a basin of water of the requisite temperature is placed in the bed, so as to allow the nates to rest on the edge of the vessel. The vaginal nozzle of a Davidson's syringe is then introduced into the rectum, and alongside of it the rectal or smaller nozzle. A current of water is then kept up for ten minutes, the water passing through the vaginal nozzle into the rectum, and returning by a steady stream through the smaller one into the basin, without causing any inconvenience to the patient. If the disease is extensive, and the colon involved for a considerable distance, a long rectal pipe may be employed instead of the vaginal nozzle.

The immediate effect on the patient is one of comfort, which lasts for about an hour.

The injections are to be continued every two hours, till the active stage of the disease is past.

#### STRETCHING OF NERVES IN THE TREATMENT OF CENTRAL NERVE-LESIONS.

(V. Nussbaum: *Centralblatt für Chirurgie*, 1876, No. 39).—As a proof that this mode of treatment can be used with good effect, not only when the affection is peripheral but also when it is central, Nussbaum reports the following case: The patient, a man aged 35 years, fell from a height, eleven years previously, and, as a result, suffered complete paralysis of the lower extremities and the sphincters and intense chronic cramps of the legs. After the failure of other methods for the relief of these cramps, the crural and ischiatic nerves of the right side were exposed by incisions and drawn out with the bent finger, and strong traction made upon them. The chronic contraction upon the right side immediately ceased. The operation and the after-treatment were performed according to the method of Leslie, and both wounds were entirely healed at the end of two weeks. The same operations, with the same results, were then performed upon the left side. After the disappearance of the chronic cramps, the patient, who had previously been bed-ridden, was able, by the aid of supports and crutches, to move himself about.

# THE CANADA MEDICAL RECORD

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## TO OUR SUBSCRIBERS.

We enclosed in our last issue accounts to all who were indebted to us, up to the end of volume four. We regret that so many have totally disregarded the appeal which their presence was intended to convey. As this is the time of the year when physicians are more than usually in funds, we again respectfully ask that our subscribers will remember the *Record*, and at once remit us the amounts indicated by their accounts.

## THE NEW MEDICAL BILL.

We publish below the full and correct text of the New Medical Bill which passed the Quebec Legislature at its last session. We specially direct the attention of our subscribers in the Province of Quebec to it, as there are several very important sections to which it is desirable they should direct their attention.

An act to amend and consolidate the acts relating to the profession of medicine and surgery in the Province of Quebec.

**WHEREAS**, the laws now in force in the Province of Quebec, for regulating the qualifications and examination of candidates for the study of medicine, surgery and midwifery, for the registration of medical practitioners, and for the infliction of penalties upon persons infringing the provisions of the Medical Act, respecting the practice of medicine, surgery and midwifery, require amendment; Therefore, Her Majesty, by and with the advice and consent of the Legislature of Quebec, enacts as follows:

1. From and after the passing of this act, the act or ordinance of the legislative council of the late Province of Quebec, passed in the twenty-eighth year of the reign of His late Majesty King George the Third, and intitled: *An act or ordinance to prevent persons practising physic and surgery within the Province of Quebec, or midwifery within the towns of Quebec and Montreal, without license*, and all other acts or part of acts in any manner relating to the practice of medicine, surgery or midwifery in the Province of Quebec, or in any manner relating to the mode of obtaining licenses to practice medicine,

surgery or midwifery therein, shall be and are hereby repealed, except in so far as relates to any offence committed against the same or any of them before the passing of this act or any penalty or forfeiture incurred by reason of such offence.

2. All persons resident in the Province of Quebec and licensed to practice medicine, surgery or midwifery therein at the time of the passing of the present act, and all persons who may hereafter obtain a license to practice medicine, surgery, and midwifery in this province, shall be and are hereby constituted a body politic and corporate by the name of *The college of physicians and surgeons of the Province of Quebec*, and shall by that name have perpetual succession and a common seal, with power to change, alter, break or make new the same; and they and their successors by the name aforesaid may sue and be sued, implead and be impleaded, answer and be answered unto in all courts and places whatsoever, and by the name aforesaid shall be able and capable in law to have, hold, receive, enjoy, possess and retain for the ends and purposes of this act and for the benefit of the said college, all such sums of money as have been or shall at any time hereafter be paid, given or bequeathed to and for the use of the said college; and by the name aforesaid shall and may at any time hereafter, without any letters of mortmain, purchase, take, receive, have, hold, possess and enjoy any lands, tenements or hereditaments or any estate or interest derived or arising out of any lands, tenements or hereditaments for the purposes of the said college and for no other purposes whatever; and may sell, grant, lease, demise, alien or dispose of the same, and do or execute all and singular the matters and things that to them shall or may appertain to do; provided always that the real estate so held by the said corporation shall at no time exceed in value the sum of \$20,000.

3. From and after the passing of this act, the persons who compose the college of physicians and surgeons shall be styled "Members of the college of physicians and surgeons of the Province of Quebec."

4. The affairs of the said college shall be conducted by a board of governors, forty in number and elected for three years; fifteen of whom shall be elected from among the members of the college, resident in the district of Quebec; nineteen from among its members resident in the district of Montreal; three from among its members resident in the district of Three-Rivers; and three from among its members resident in the district of St. Francis; and of the said board of governors neither more nor less than eight shall be resident in the city of Quebec; and neither more nor less than eight in the city of Montreal; provided always that not less than two members out of the city members shall be delegates from each of the Universities, Colleges and incorporated medical schools now existing in the Province of Quebec, to wit: The University of Laval, the University of McGill, the University of Bishop's College, and the incorporated school of medicine and surgery of Montreal affiliated with the University of Victoria College or with any other British University; and at each elec-

tion of the board of governors, every member of the said corporation shall have the right of voting by proxy.

2. Of the aforesaid districts, the district of Quebec shall comprise the present judicial district of Quebec, Gaspé, Saguenay, Chicoutimi, Rimouski, Montmagny, Beauce, and Kamouraska; the district of Montreal shall comprise the present judicial districts of Montreal, Terrebonne, Joliette, Richelieu, Bedford, St. Hyacinthe, Iberville, Beauharnois and Ottawa; the district of Three Rivers shall comprise the present judicial districts of Three-Rivers, and Arthabaska, and the district of St. Francis shall consist of the present judicial district of St. Francis.

3. The members of the Board of Governors shall be elected for a period of three years, but any member may resign his appointment at any time by letter addressed to the secretary of the said board, and upon the death or resignation of any member of the said board it shall be the duty of the secretary forthwith to notify the university or body wherein such vacancy may occur, of such death, resignation or removal, and such university or body shall have the power to nominate another duly qualified person to fill such vacancy, or if the vacancy be caused by the death, resignation or removal from the electoral city or district, of any member elected from the electoral cities or districts, the Board of Governors shall fill up such vacancy from amongst the eligible members of the college in the city or district where such vacancy shall have occurred, by an election by ballot at the next ensuing meeting subsequent to the occurrence of such vacancy, and it shall be lawful for the Board of Governors to exercise during such vacancy the powers of the board hereinafter mentioned.

5. The said board of governors shall be, and are hereby constituted "The provincial medical board," in which capacity they shall meet to perform the several duties devolving upon them under this act as the board of governors of the college, not less than twice in each year, at such time and place as by them shall be deemed most fit, and on which occasions seven shall be a quorum, for the transaction of business.

6. From and after the passing of this act, no person shall practice medicine, or surgery, or midwifery, in the Province of Quebec, unless he shall have obtained a license from the provincial medical board who are hereby authorized to issue such license.

7. Every person who has obtained or may hereafter obtain a medical degree or diploma in any university or college mentioned in section IV of this act, shall be entitled to such license without examination as to his qualifications; provided always that the provincial medical board shall have the power and option of extending the same privilege to the holders of medical degrees and diplomas of other British or Colonial Universities and Colleges.

8. From and after the passing of this act, no person shall be admitted as a student of medicine, surgery, or midwifery, unless he shall have obtained

a certificate of qualification from the Provincial Medical Board, and no one shall be entitled to the license of the college on presentation of a diploma unless he has been previously admitted to the study of medicine, in accordance with the provisions of this act, or unless he has passed an equivalent preliminary examination before an authorised college or licensing board in Her Majesty's Dominions, acceptable to the board created by this act.

9. At the first regular meeting of said board after the passing of this act, there shall be appointed by the provincial medical board for three years [subject to the continued approval of the board] four persons actually engaged in the work of general education in the province of Quebec, to examine all persons about to begin the study of medicine, surgery and midwifery, on the subjects of general education hereinafter mentioned as belonging to the preliminary qualification of medical students, viz.: one examiner skilled in the French language and one skilled in the English language for the city of Montreal, and one skilled in the French language and one skilled in the English language for the city of Quebec. The subjects of the preliminary qualification to be English and French, latin, geography, history, arithmetic, algebra, geometry, *belles lettres*, and any one of the following subjects: Greek, natural and moral philosophy; and the candidate to present a certificate of good moral character; provided that all medical students who before the passing of this act shall have passed their preliminary examination before the examiner or examiners of any university, or incorporated school, or provincial medical board, shall not be required to pass before the examiners mentioned in this section.

10. Every person wishing to obtain a license to practice medicine, surgery and midwifery in this province, and to be registered under this act, and who shall not have obtained a degree or diploma in medicine, surgery and midwifery from any of the institutions mentioned in clause 4 of this act, shall, before being entitled to such license and to registration in this province, pass an examination as to his knowledge and skill for the efficient practice of medicine, surgery and midwifery before this board; and upon passing the examination required and proving to the satisfaction of the examiners that he has complied with the rules and regulations made by the provincial board, and on payment of such fees as the board may by general by-law establish, such person shall be entitled to a license to practice medicine, surgery and midwifery in the province of Quebec.

11. The said board of governors of the college of physicians and surgeons shall have power:—

1. To regulate the study of medicine, surgery and midwifery by making rules with regard to the preliminary qualification, duration of study, curriculum to be followed, and the age of the candidate applying for a license to practice: provided always that such rules shall not be contrary to the provisions of this act.

2. To examine all credentials purporting to entitle

the bearer to a license to practice, and all degrees or qualifications sought to be registered in this province, and to oblige the bearer of such credentials, degrees or qualifications to attest on oath, (to be administered by the chairman for the time being,) that he is the person whose name is mentioned therein, and that he became possessed thereof legally.

3. To cause every member of the profession now practising, or who may hereafter practise in the Province of Quebec, to enregister his name, age, place of residence, nativity, the date of his license and the place where he obtained it, in the books of the College.

4. To fix the period of probation which persons must undergo before being eligible for election as governors of the college, which period shall not be less than four years, and to make all such rules and regulations for the government and proper working of the said corporation and the election of a president and officers thereof, as to the board of governors may seem meet and expedient, which said rules and regulations shall, before they shall come into effect, be sanctioned by the lieutenant-governor in council of this province after the same shall have been submitted to him for approval and by him allowed.

12. The "provincial medical board":

1. Shall from time to time, as occasion may require, make rules and regulations for the guidance of the "examiners," and may prescribe the subjects and mode of the examinations, the time and place of holding the same, and generally may make all such rules and regulations in respect to such examinations not contrary to the provisions of this act, as they may deem expedient and necessary.

2. It shall regulate the study of medicine, surgery and midwifery by making rules with regard to the preliminary qualifications, duration of study, curriculum of studies to be followed by the students.

Provided always that such rules shall not be contrary to the provisions of this act, and that any change in the curriculum of studies fixed by the board shall not come into effect until one year after such change is made.

3. It shall have power to make tariffs of rates to be charged in towns and country for medical, obstetrical or surgical advice, or for attendance—or for the performance of any operation, or for any medicines which shall have been prescribed or supplied.

4. It shall appoint assessors either out of its own body or from among the registered members of the college to visit and attend the medical examinations of the various universities, colleges, and incorporated schools of the province, and to report to the provincial board upon the character of such examinations; but such assessors shall not be chosen out of any one of the teachers in any one of the said universities or incorporated schools, and should such report be at any time unfavorable, to any university, college or incorporated school, the provincial board shall in such case and under such circumstances have the power to refuse the registration of the degree or diploma of the institution so reported upon, until

such examination shall have been amended. For such purpose the provincial board shall appoint or elect assessors, two or more of whom shall attend the examinations at each university, college or incorporated medical school.

5. It shall be the duty of the above institutions to notify the provincial board of the time or times at which their examinations shall be held, at least one month previous to such examinations.

13. The provincial medical board shall have the power to fix by by-law the salary or fees to be paid to the officers, and to the examiners and visitors appointed by the said board; as well, also, the fees to be paid by all candidates entering on the study of medicine, as also by all candidates for the license to practice medicine, surgery, and midwifery, as well as the fee to be paid for registration; and the said board may dispose of all fees received in whatever manner they may think most conducive to the interests of the college.

14. The qualifications to be required from a candidate for examination to obtain a licence to practise shall consist in his not being less than twenty-one years of age; that he has followed his studies uninterruptedly during a period of not less than four years, commencing from the date of his admission to the study of medicine by this board, and that during the said four years he shall have attended at some university, college or incorporated school of medicine, within Her Majesty's dominions, not less than two six months' courses of general or descriptive anatomy,—of practical anatomy—of surgery—of practice of medicine—of midwifery—of chemistry—of *materia medica* and general therapeutics—of the institutes of medicine or physiology and general pathology,—of clinical medicine and of clinical surgery,—one six months' course or two three months' courses of medical jurisprudence,—and one three months' course of botany,—one three months' course of hygiene—and a course of not less than twenty-five demonstrations upon microscopic anatomy, physiology and pathology; also, that he shall have attended the general practice of an hospital in which are contained not less than fifty beds, under the charge of not less than two physicians or surgeons, for a period of not less than one year and a half, or three periods of not less than six months each; and that he shall also have attended six cases of labor, and compounded medicine for six months; and to remove all doubts with regard to the number of lectures which the incorporated schools of medicine of the Province of Quebec are bound to give: be it enacted and declared, that each six months' course shall consist of one hundred and twenty lectures, except in the case of clinical medicine, clinical surgery, and medical jurisprudence; of the four years' study required by this act, three six months' sessions at least shall be passed in attendance upon lectures at a university, college or incorporated school of medicine recognized by this board; the first whereof shall be so passed the year immediately succeeding the preliminary examinations.

15. All persons obtaining the license to practice from the college of physicians and surgeons of the Province of Quebec, shall be styled members of the college, but shall not be eligible as governor within a period of four years from the date of their admission as members; and the said election of governors shall be made under such rules and regulations therefor, and in such a manner as the said board of governors shall ordain; the members of the college shall pay the sum of two dollars a year for the use of the college.

16. The provincial medical board shall have the power to make rules and regulations respecting the admission of females to the practice of midwifery in this province.

17. The provincial medical board shall cause to be kept by the registrar, a book, or register, to be called the register, in which shall be entered, from time to time, the names of all persons who have complied with the enactments hereinafter contained, and with the rules or regulations made or to be made by the provincial medical board respecting the qualifications to be required from practitioners of medicine, surgery and midwifery in the Province of Quebec; and those persons only whose names have been or shall hereafter be inscribed in the register above mentioned, shall be deemed to be qualified and licensed to practice medicine, surgery, and midwifery in the Province of Quebec; and such register shall at all times be open and subject to inspection by any duly registered practitioner in the province, or by any other person.

18. It shall be the duty of the registrar to keep the register correct in accordance with the provisions of this act and the orders and regulations of the provincial medical board, and he shall from time to time make the necessary alterations in the addresses, or qualifications of the persons registered under this act; and the said registrar shall perform such other duties as shall be imposed upon him by the provincial medical board.

19. If the registrar be convinced of a felony he shall be disqualified from again holding any office in the college.

20. Every member of the medical profession who, at the time of the passing of this act, may be possessed of a license from the college of physicians and surgeons of Lower Canada to practice medicine surgery and midwifery in the Province of Quebec shall, on the payment of the fee of one dollar, be entitled to be registered on producing to the registrar the document conferring or evidencing the qualification, or each of the qualifications in respect whereof he seeks to be so registered, or upon transmitting by post to such registrar, information of his name and address, and evidence of the qualifications in respect whereof he seeks to be registered and of the time or times at which the same was or were respectively obtained, provided he register within one year after the passing of this act.

21. Any person entitled to be registered under this act, but who shall neglect or omit to be so registered, shall not be entitled to any of the rights or

privileges conferred by this act so long as such neglect or omission continues, and he shall be liable to all the penalties imposed by this act, or by any other act which may now be in force against unqualified or unregistered practitioners, and he shall pay a fine of five dollars every year until he is registered.

22. No person shall be entitled to recover any charge in any court of law for any medical or surgical advice, or for attendance, or for the performance of any operation, or for any medicine which he shall have prescribed or supplied, nor be entitled to any of the rights or privileges conferred by this act, unless he shall prove that he is registered under this act and has paid his annual contribution to the college.

23. No certificate required by any act now in force or that may hereafter be passed in this province from any physician or surgeon or medical practitioner, shall be valid unless the person signing the same be registered under this act.

24. Any registered member of the medical profession who shall have been convicted of any felony in any court shall thereby forfeit his right to registration, and, by the direction of the provincial medical board, his name shall be erased from the register; or in case a person, known to have been convicted of felony, shall present himself for registration, the registrar shall have power to refuse such registration.

25. Any person not entitled to be registered in this province, who shall be convicted upon the oath of one or more witnesses in accordance with the provisions of 38 Vict. chap. 25 of this province, of having practised medicine, surgery or midwifery in the Province of Quebec, for hire, gain, or hope of reward shall, upon summary conviction before a sheriff, or district magistrate or recorder, or judge of the sessions of the peace, be condemned to pay a fine of not less than \$25, nor exceeding \$100.

2. A like penalty shall be incurred by every person assuming the title of doctor, physician, or surgeon, or any other name implying that he or she is legally authorized to practice medicine, surgery or midwifery, in this province, if unable to establish the fact by legal proof, and every person who by advertisement in any newspaper or by printed or written circulars, or by card, or by sign board assumes any addition, name or description implying or calculated to lead persons to infer that he or she is a duly registered or qualified practitioner of medicine, surgery, and midwifery or any one of them, or any person offering or giving his or her services as physician, surgeon or midwife, if not duly licensed and registered in this province, shall in each such case be liable to be condemned to a like penalty.

3. In every prosecutions under this act, the proof of registration shall be incumbent upon the prosecuted.

4. All prosecutions under this act, shall take place before any sheriff, district magistrate, or recorder, or judge of special sessions of the peace having jurisdiction in the locality where the offence was committed, and such sheriff, district magistrate,



or recorder or judge of special sessions of the peace, besides the fine above mentioned, shall have power to condemn in costs; and, in the event of the costs or the fine not being paid, to order an imprisonment for a term not exceeding thirty days, unless the fine and costs be sooner paid.

26. The penalties imposed by this act shall be recoverable with costs, and the same may be sued for, and recovered by the said college of physicians and surgeons of the Province of Quebec by its corporate name, and being recovered shall belong to the said corporation for the use thereof.

And neither in any such suit or in any other civil action to or in which the said corporation may be a party or interested, shall any member of the corporation be deemed incompetent as a witness by reason of his being such member;

2. All penalties recoverable under this act, shall be paid over to the court convicting, and by the latter, to the treasurer of the provincial medical board. The provincial medical board may authorize any person to prosecute in his own name, any person for any infringement of this act, and the provincial medical board shall have power to allow the prosecutor the whole or a portion of the penalties recovered.

27. In all cases where proof of registration under this act is required, the production of a printed or other copy of the register, certified under the hand of the registrar of the college of physicians and surgeons of the Province of Quebec, for the time being, shall be sufficient evidence that all persons therein named are registered practitioners, in lieu of the production of the original register; and any certificate upon such printed or other copy of the register, purporting to be signed by any person in his capacity of registrar of the college under this act, shall be *prima facie* evidence that such person is such registrar, without any proof of his signature, or of his being in fact such registrar.

28. The present board of governors elected under the provisions of the acts therein before repealed shall be continued and shall act until after the next triennial election, but subject in all other respects to the provisions of this act; and all by-laws, rules and regulations heretofore made by the said college of physicians and surgeons of Lower Canada shall remain in force until repealed or modified under the provisions of this act.

29. The officers appointed under the provisions of the acts repealed, shall retain their respective offices, and perform their respective duties under the provisions of this act, and all books and registers heretofore kept by them in conformity with the acts hereby repealed, shall be continued in use for their respective purposes under this act.

31. The college of physicians and surgeons of the Province of Quebec is hereby vested with all the rights, powers, privileges, property and assets, heretofore belonging to the college of physicians and surgeons of Lower Canada.

32. Nothing in this act contained shall be construed to affect the rights of any persons under the

provisions of the act 28 Vict. cap 59 and amendments thereto, 29 Vict. chap. 95.

Our sanitary condition, as regards small-pox, would seem to attract the notice of the profession in Great Britain, as the following, from Dr. Barnes, of London—the very eminent physician and practical writer—shows. We believe a friend of Dr. Barnes sent him a copy of the *Star*, (Montreal,) containing a report of a lecture by Dr. Coderre, whereupon Dr. Barnes wrote to Dr. Ballard, the following letter:—

31 Grosvenor Street,  
Grosvenor Square, W.  
December 21, 1876.

DEAR BALLARD,—You may know that there is a fanatic opposition to vaccination, in Montreal, chiefly backed by some French Canadian doctors; one of these, amongst other statements, quotes you as publishing that, "from January 1st, 1872, to August, 1874, 1074 children had died of syphilis after being vaccinated, and that thousands of these had their blood contaminated." This doctor's name is Coderre; his statement made in a public lecture. The Mayor of Montreal is Dr. Hingston, a man of excellent position and unusual ability. He is charged with the defence of vaccination.

It may not be amiss to say that Montreal is ravaged by small-pox, and that it is kept up and spread in the French-Canadian quarters. The bigotry and ignorance of the masses is something mediæval. I shall be glad to forward to Dr. Hingston anything you may have on the matter.

\* \* \* \* \*

Yours, with all good wishes,  
ROBERT BARNES.

When Dr. Ballard received the above, he at once wrote to Dr. Hingston, the following:

12 Highbury Terrace,  
London.  
December 27, 1876.

DEAR DR. HINGSTON,—I received a note from our friend Dr. Barnes—it is my apology for troubling you with this letter.

I need not, I am sure, tell you that I never published such a statement as that attributed to me by the person named in Dr. Barnes' note. Its absurdity would, one would think, render my repudiation unnecessary. Since 1868, when my essay on vaccination was published, I have written nothing upon the subject of vaccinal syphilis. I may add that, although the subject is one which has, since that date, occupied a good deal of my attention, I have seen no reason to modify in any essential respect, the conclusions I had arrived at previously, and had published in my essay.



As it is possible you may not have seen my essay, I have ventured to send a copy of it for your kind acceptance. I hope it will arrive safely.

Believe me to be,  
Dear Dr. Hingston,  
Yours very faithfully,  
EDWARD BALLARD.

The thanks of the profession here are certainly due to Dr. Barnes, for promptly drawing Dr. Ballard's attention to the statement in question, and to Dr. Ballard's equally prompt refutation. It will make no difference, however, for Dr. Coderre will, doubtless, still follow his mischievous course, unconvinced and unconvincedable.

#### THE LATE DR. E. K. PATTON, OF MONTREAL.

The late Dr. E. K. Patton, of Montreal, who died on the 3rd of January, was eldest son of R.G. Patton, Esq., formerly assistant postmaster of Quebec, and was born in that city in 1845. He received a liberal education, first at the classical school of Mr. Brown, then at the Quebec High School, and, finally, he attended the Quebec Seminary for five years. After spending two years in the medical department of Laval University, he completed his course at McGill, and graduated in 1867. Being full of zeal and love for his profession, he would not consent to begin practice until he had gained experience in the hospitals of London. After spending six months in St. Thomas' Hospital, he was recommended by its authorities for the post of assistant physician to the distinguished surgeon Mr. Hochee, of Finchley. He enjoyed very great privileges and opportunities of extending his medical experience in Mr. Hochee's large practice. After remaining one year with Mr. Hochee, he returned to London, and passed his examination for the membership of the Royal College of Surgeons and a licentiate of the Society of Apothecaries. Shortly afterwards he was selected from among a large number of applicants, to be the medical superintendent of Munster House Asylum, and also house surgeon of Sheffield Infirmary. In the latter place he acquired much experience and skill in surgery. Desirous of more experience in a new field, he made two trips to the West Coast of Africa, as physician on one of the regular line of steamers. He then returned home to see his friends, before settling in one of the county towns of England, where bright

prospects were before him. The strong love of friends influenced him to change his purpose, and shortly afterwards he settled in Montreal, and began at the very bottom of the ladder to earn for himself a name and a practice in the city where he had graduated. Unassisted by influential friends, having no one to introduce him, he found it slow, very slow, climbing for two or three years. Sometimes he was almost discouraged, when he contrasted his life in Montreal with his success and prospects in England. He knew his acquirements, but he did not parade them before the public. He possessed a genial nature and a kind heart. He was modest and gentlemanly in his deportment and successful in practice. Five years were sufficient to give him a good standing as one of the rising physicians of Montreal, to secure him many kind friends with whom he was a great favorite, and to afford him the satisfaction of knowing that his ability was being recognised and appreciated. Dr. Patton was one of the attending physicians to the Montreal Dispensary, and was a member the Medico-Chirurgical Society of Montreal. His death was somewhat sudden. He had been out spending the evening on the 27th of December, and on the night of the 28th was seized with a severe rigor. On the 29th he was seen by his friend Dr. Bell, whose diagnosis of the case was doubtful; on the 30th the diagnosis became clear—pleura pneumonia (double)—and the disease rapidly progressed in spite of treatment, and, early on the forenoon of the 3rd of January, he breathed his last. The record of the temperature, as furnished by Dr. Bell, is somewhat remarkable, especially toward the termination of the scene. On the morning of the day he died, at 7 a.m., it stood at 105; 9 a.m., 106; 10 a.m., 106.3; 11 a.m., 107.5; 11.30, 109.2; and at a little before 12 he died. His funeral, which took place on the 6th of January, was largely attended—the Freemasons and Odd Fellows, of which organizations he was a member, turned out in large force.

*Studies—chiefly Clinical, in the Non-Emetic Use of Ipecacuanha, with a Contribution to the Therapeutics of Cholera.* By ALFRED WOODHULL, M.D., assistant surgeon U. S. Army. Philadelphia: J. P. Lippincott, 1876. Montreal: Dawson Brothers.

Of late years the profession have become

aware of other virtues in ipecacuanha than forming an ingredient of almost every cough mixture, and being used as an emetic. However, no matter how much may have been known as to the therapeutical value of this drug, a very great deal of information, and much of it of a very practical character, can be learned from this unpretending little volume of about one hundred and fifty pages, the name of which heads this brief notice. The author claims ipecacuanha is a direct nerve stimulant, acting chiefly, if not entirely, upon the sympathetic system. This he attempts to prove by facts, chiefly clinical, and we think many of the cases which he reports strongly corroborate his assumption.

#### ELIXIR FERRI ET CALCIS PHOSPHATIS CO.

This is a very elegant, agreeable and valuable preparation, which is manufactured by Dr. Wheeler, of Montreal, and concerning which we can speak from actual experience. We have prescribed it for several years past, and have found it to answer our expectations to the fullest degree. We direct our readers to an advertisement concerning it, which will be found on the back page of the *Record*.

#### SMOKING BELLADONNA IN ASTHMA.

Dr. Reeves states, in the *Melbourne Med. Record* that smoke derived from the leaves of belladonna possesses much more power in cutting short an attack of asthma than that from stramonium. A long pipe is the best means of smoking them, the patient being instructed to draw the smoke deep into the chest. If, when the attack is at its height, he has not the power of doing this, the leaves may be placed in a saucer containing lighted charcoal or wood-ashes, which should be placed on a chair in front of the patient—this chair, as well as his own, being covered with a large sheet, so as to confine the fumes before the leaves are put on the hot charcoal. From two and a half to five grains of the leaves are sufficient when smoked, and from five to twenty grains when burned. If the smoke is drawn deeply into the chest, the relief is immediate, expectoration of phlegm taking place. It is in the spasmodic form of asthma, where there is little or no expectoration, that the greatest relief is obtained, for, when the tubes are loaded

with mucus, the smoke cannot get access to their muscular tissue. The relief is most marked when the remedy is used after the paroxysm has commenced, before the spasm prevents access of air to the smaller tubes and air-cells. Tobacco-smokers do not receive the same amount of relief as others. Temporary headache of a throbbing character may be produced if the leaves are used too freely.

#### TO DESTROY WARTS.

A medical exchange states that a drachm of nitrate of silver dissolved in an ounce of nitromuriatic acid makes a solution which, applied to warts with a fine brush, will permanently cure them in four days.

We may add that we know of nothing better to remove warts than the leaves of a common bean. Crush the leaves between the fingers, and squeeze out the juice upon the warts two or three times a day, until they dry up and disappear. The cure will generally be complete in less than a week.

#### "UNION IS STRENGTH."

A good story is told of Dr. Radcliffe, to the effect that once, when attending an intimate friend during a dangerous illness, he declared (actuated by a generous feeling) that he would receive no fee. But when cure was complete, and the physician was taking his leave, "I have put every day's fee," said the patient, "in this purse, my dear doctor; nor must your goodness get the better of my gratitude." The doctor eyed the purse, counted the days of his attendance in a moment, and then, extending his hand by a kind of professional mechanical motion, replied, "Well, I can hold out no longer; single, I could have refused the guineas; but all together, they are irresistible!"

**CHLORAL OINTMENT.**—An ointment, useful in eczema and allied affections, is made by incorporating from thirty to sixty grains of chloral hydrate with one ounce of simple ointment.

#### BIRTHS.

In Toronto, on the 7th December, 1876, the wife of Dr. H. E. Buchan, of a daughter.

In this city, on the 15th instant, the wife of William H. Hingston, M.D., of a son.

#### DIED.

In Montreal, on the 3rd of January, after a few days' illness, Edward K. Patton, M.D., aged 32 years.

## Original Communications.

*Surgical Shock.* By WILLIAM FULLER, M.D.,  
Professor of Anatomy, University of Bishop's  
College. (Read before the Medico-Chirurgical  
Society of Montreal, January 19th, 1877).

GENTLEMEN,—Surgical shock is a condition which appears to be very imperfectly understood; consequently, its treatment is wholly empirical and not based upon any scientific knowledge or theory. In the works on surgery the symptoms have no physiological arrangement, and the treatment is directed toward stimulating the circulation, generally by alcohol, with certain cautions against producing a too sudden or intense reaction.

In the study of shock we must go back to the moment of accident and take into consideration the subjective symptoms which take place previous to the arrival of the surgeon. I find upon enquiry that there is a sequence of sensations experienced by the patients, which is nearly the same in all cases, modified by the nature and violence of the accident and the nervous susceptibility of the person.

As an illustration of these sensations and the order in which they occur, I will give a few cases described in the patients' own words. In a comparison of the description of their feelings and their sequence given me on paper, I was struck with the close resemblance and the surprising distinctness with which they were fixed on the memory at a time when excitement and physical depression would seem to be an unfavorable moment to receive a lasting mental impression.

Case 1.—A robust youth, aet. 19 years, injured in the hand by a circular saw, describes his sensations as follows: "I felt at first when the saw struck my hand a dull thud pass over my whole body, and a sound in my ears as if a bass drum was struck close to my head. There was no pain, and I did not know that I was caught until I saw the blood. In a couple of minutes I felt a tingling feeling, something like a sleepy foot, all over me as if the blood was rushing very fast through my veins. I then felt very warm, and broke out in a sweat, got weak, had a buzzing in my ears, felt sick at the stomach, and was chilly for a few hours, when I got

warm. I was also sleepy while I was cold, and sick at the stomach."

Case 2.—A shunter, of good constitution, aged 32 years, had his ankle and foot crushed by a wheel, says: "As the wheel passed over my foot I felt no pain, but a feeling all over me as if I was pressed down by a heavy weight. Immediately after I was released I experienced a burning sensation in the injured part as if it were too close to the fire. This feeling ran up my leg and spread over my whole body, when I felt too warm. This lasted, I think, from three to five minutes, when a very acute pain set in with a chill, and I broke out in a perspiration all over. I think there was a sound in my ears like running water, and at the same time a desire to vomit and a general weakness. I also had a difficulty of breathing, and wanted air and water. I did not feel the burning sensation after the chill. This is all I remember until after the amputation of my leg."

Case 3.—S. H., driver, healthy, aged 40 years, was badly scalded on the legs and arms by hot water and steam issuing from a boiler, describes his feelings as follows: "The steam caused a prickling on my limbs like needles. I next felt a numbness in my bones and body, had no other feeling for fifteen or twenty minutes while I was walking about. I went into a car and sat down. Did not know that I was burned except in the hands. My heart then began to jump violently, and I felt very warm for about half an hour. After that I was very cold, and took a great pain in the stomach and then in the back, and had cramps in the stomach and limbs. About four hours after the accident I got a glass of brandy, which had no more effect on me than water. I was very cold all this time and my belly swelled. The pain came in my back about two hours after I was scalded and lasted several days. I was insensible, slept, and remember very little of what passed for a couple of days. The doctor gave me a powder when I got home, which I think warmed me a little.

I have made enquiry into several cases in order to elicit the early symptoms of shock, and have found the sensations and the order of their occurrence to closely correspond to the above illustrations which I have chosen, as they were the most intelligently given, and also as representing three kinds of accident, viz.: sudden injury, an injury by a crush done slowly and by

a scald. The shocks in these cases were moderate, and its stages were sufficiently slow that the order of sensations could be observed. I have not been able to get much information in cases of severe shock, farther than that there was a terrible feeling which was not pain.

Assuming these observations to be correct, we will now sum up the symptoms of shock, subjective and objective, and endeavor by the light of physiological research to explain their significance. Experiment upon animals has proved that the first effect of excitation of the cerebro-spinal system is contraction of the vascular system of the body, increasing the tension of the vessels, accelerating the blood flow and slowing of the heart's action. 2nd. A stage of paralysis of the vaso-motor system with dilatation of the vessels, diminished tension, stagnation of the blood and frequent ineffectual heart's action.

Violent irritation stops the circulation, 1st, by excessive contraction of the vessels, and 2nd, by the complete paralysis that follows, the capillaries being dilated to such an extent as to contain all the blood, so that none reaches the heart and large veins which are found to be empty. This is observed in a frog killed by a sharp tap on the abdomen: all the blood is contained in the capillaries of the intestines, and thus it is removed from the circulation as effectually as if the animal had been bled. This is what happens in extreme shock, which is immediately fatal.

Continued and repeated irritation causes alternate contraction of the vessels, and finally exhausts the nerves and produces the condition of extreme shock. The frequency and debility of the heart's action in this stage of exhaustion is not due to direct depression of the organ itself, but to want of blood to fill it, since it immediately resumes its wonted vigor if it is artificially filled with blood or a saline solution.

Irritation of a sensory nerve excites, 1st, its own centre, and the reflexion is upon the vessels in immediate connection with it. A stronger irritation extends to other centres in physiological relation with the first and the vessels in reflex relation with them. A still stronger irritation extends over all the nerve centres, but affects most those immediately irritated by it, thus, while the later symptoms of shock may vary, the several stages of this condition are the same.

In the application of these principles to the symptoms of shock we observe, 1st, the "thud," the "pressing feeling," the "numbness in the bones," all mean the same thing, viz.: shock or sudden excitation of the cerebro-spinal system and primary contraction of the vascular system. The next sensation unanimously expressed was that of warmth and excited action of the heart. This is probably the stage of commencing a moderate dilatation of the vessels, when the tone is moderate, the heart full and vigorous, and the circulation consequently good. This stage is short, and precedes complete dilatation, followed by perspiration and symptoms due to deficient supply of blood to the nerve centres, such as general debility, nausea, blindness, tinnitus aurium, syncope, convulsions, &c.; again, pallor and coldness of the surface, and suppressed secretion of the kidneys take place from accumulation of blood, as a passive congestion, in the abdominal organs, which contain a large amount of this fluid on account of their extensive capillary system. A rapid small fluttering pulse and thirst are due to an empty state of the heart and great vessels. There are other symptoms of shock the causes of which are not so evident. Among these, I will mention moderate dilatation of the pupils, an upward tendency of the eyes, tympanites, imperfect breathing, sighing, and a constant desire to be raised up, and, in some severe shocks, a violent pain in the stomach, which is often the unfortunate man's only and great distress. This symptom appeared to me to occur in those who were injured shortly after a meal. In a hopeless case I once injected hypodermically two or three grains of morphia in an hour without any sensible effect.

Vomiting and chills are reactionary symptoms, the former by forcing the blood from the abdomen to the heart, and the latter by dilating the vessels leading to other parts of the body, and thus assisting the abdominal vessels to resume their tone by relieving the pressure upon their walls.

Beside the direct shock to the nervous system and the secondary effect upon the circulation, there is another consideration worthy of notice: We are aware of the influence of the nerves upon the nutritive processes of the body, the secretions and the blood. Instances of the immediate changes produced upon the mother's

milk by mental shock, causing death in the infant, are upon record. The vital quality of the blood is that condition in which the chemical and physiological interchanges in and among its elements is steadily and continuously maintained, and any disturbance which destroys the equilibrium of these changes with the nutritive supply is a toxic agent and lowers vitality. Shock may thus act upon the blood as an electric discharge during a thunder shower does upon milk, destroying at once to a greater or less extent its specific quality so that, while the nerve centres and heart may be capable of resuming their function, the blood elements have passed into stable combinations, incapable of those reactions with the tissues in nutrition which constitute the phenomenon of life. With a view of ascertaining the fact as to whether the nervous centres were capable of resuming their function if they were supplied by living blood, and also with a desire to benefit an otherwise hopeless case, I transferred about eight ounces of blood from a sheep into the vein of a man laboring under severe shock. He had not lost much blood before or during the amputation of his thigh. Before the transfusion this man was pale, sunken, cold, pulseless, and bedewed with the sweat of death, evidently his time was short: no air entered with the blood but the immediate effect was the production of a violent spasm and insensibility, the pupils dilated widely, the eyes stared upwards, the head was thrown back, the limbs straightened, and he took a deep inspiration. He remained motionless for about what seemed to me to be two or three minutes when gentle respiration began and, in a very short time consciousness returned and the muscular system became relaxed. He then expressed surprise at the tumult, looked around and asked "what is the matter?" The pulse returned to the wrist in good volume, the countenance resumed a natural appearance and fullness, his extremities got warm and the perspiration left his body. He expressed himself as well, said he had no pain, and was wholly unaware of what had just happened; he entertained hopes of his recovery and said that he felt better than at any time since he was hurt. Complete reaction was established and we were all sanguine of his recovery. Excitement prevailed to such an extent that time was not noted, but I think it was about twenty minutes

or half an hour when he was overtaken with a like spasm to the one described, except that he died, leaving only the satisfaction that this unhappy termination did not result immediately after the experiment.

The important deductions derived from this case are: That the nerve centres *are* capable of renewing their function if supplied by living blood, and that the state of the pulse and circulation is not due to *debility* of the heart, but to an insufficiency of blood flowing to it from the veins. The cause of the convulsions is not clear, but they resembled very closely the inspiratory convulsive movements in the first stage of asphyxia, produced by tying the trachea or opening both pleura of an animal.

We will now pass to a consideration of the treatment of shock. It is evident that, if the above observations are correct, in order to restore the circulation a *cardiac* stimulant is not so much indicated as some means of restoring the tone of the vascular system, the unloading of the congested capillaries of the internal organs of the body, which by containing most of the blood removes it from the influence of the heart. If, now, we turn our attention to the physiological action of stimulants, such as alcohol, opium, etc., we will find that they differ only in a degree with those of shock itself. There is a primary stage of contraction of the vessels accompanied by acceleration of the circulation, and a secondary stage of dilatation of the capillaries and depression, which if carried to excess produces unconsciousness and congestions. These primary and secondary stages vary in extent and duration according to the medicine and the dose which is administered. It appears to me that the benefit to be derived from these medicines is included in their primary action only, that they should be given in small and repeated doses, and that any excess is attended with injury by increasing the condition which they are intended to alleviate. I think I have observed many instances, especially in the administration of alcohol in large draughts, where positive injury was done, and here let me quote a few cases in illustration. Case 1.—Carpenter, aged 55 years, badly injured about the hip, and thigh crushed. I saw him ten minutes after the accident, shock was not as great as would have been expected from so serious an injury; pulse was full, and about 100. I im-

mediately injected hypodermically about  $\frac{1}{2}$  gr. morphia. Half an hour after, he was cheerful, had a good pulse, and no increase in the symptoms of shock. He then got about half a glass of brandy with a little water, directly after which he complained of feeling sick and shortly vomited; he expressed the opinion that the liquor made him worse. The condition after amputation was that of severe shock; he was freely stimulated, and continuously vomited notwithstanding champagne and other anti-emetics, until he died, which was on the 5th day after the injury.

Case 2.—Shunter, healthy, aged 32 years, had his knee crushed into a space between two rails of a frog by a wheel which fractured the bones and lacerated the soft parts. The night was exceedingly cold, and it was about three-quarters of an hour before he could be extricated. I found him lying in a shanty, cold but with a fair pulse. There was no stimulants at hand. I gave him half a grain of morphia, by the mouth. His condition remained about the same for three hours, until we got him into a suitable place and assistance to amputate. Shortly before the amputation he drank about three-quarters of a glass of brandy, which, as in the last case, made him immediately sick, and he vomited for the first time. He also expressed the belief that the brandy hurt him, though he was accustomed to its daily use. The sequel was, as in the case before described, he died in thirty-six hours after the operation, under severe shock. He had suffered very little loss of blood.

Case 3.—Shunter, healthy, aged 32 years, suffered a crush of the ankle and foot: shock moderate. Got half a grain of morphia, about half an hour after the accident. Had some nausea, but did not vomit. Got no alcoholic stimulant either before or after amputation of the leg. Reaction was early established, without any of the most distressing symptoms observed in the previous case, though by comparison of constitution and condition after the accident, the cases were apparently alike.

Case 4.—Locomotive superintendent, aged 50 years. Both thighs and legs horribly mangled by the wheels of a locomotive. Shock very great, and referred all his pain and distress to the pit of the stomach; refused stimulants; did not vomit. Died in two hours during an agonizing pain. In two other cases of very

severe injuries, of which the persons died in a few hours from shock, both refused stimulants, and neither vomited. Again, in minor injuries, though the patients are generally faint and pale, yet they do not vomit, at least seldom.

I may be laboring under a misapprehension, but I am inclined to believe that the most distressing symptom of shock, that is, vomiting, is frequently due to the administration of large draughts of alcohol, and, according to my experience, as a stimulating agent, it is far inferior to opium, the effect of which is slower, more steady, and permanent. It soothes instead of excites the nervous system. Its special action is to dilate the vessels leading to the brain, so that the nerve-centres at least receive their share of what blood is in circulation. It is given on the same principle as in profuse diarrhœa or after hæmorrhages. It tones up the vessels of the internal organs, if not by direct action upon their coats, it does so by dilating other vessels, as those of the head, acting the part of a derivative, and thus allowing them to contract slowly upon their contents and expel the stagnant blood into the circulation. Opium probably has a direct influence upon unstriated muscular fibre, as most of us must have observed strong uterine action produced at a certain stage of labor as its effect upon the pains which were weak and ineffectual before its administration. Again, in tympanitis, which is a paralyzed condition of the muscular coat of the bowels, under the influence of opium they slowly regain their tone, the abdominal walls become flaccid, and the bowels move during the continued action of the medicine.

The sleep produced by opium is placid, refreshing, and lasts for several hours. That produced by alcohol is bloated, interrupted, and unrefreshing. The advantage of opium is that its action is gentle, gradual, and lasting, so that the nervous system is enabled to recover itself before the secondary action of the medicine takes effect, and the first difficulty thus is tided over. Beside medicine, external stimulants, frictions, heat to the epigastrium, and warm drinks, if they are acceptable, are useful. Quietude is a necessity. Reaction, it must be remembered, is a slow process, patience is required, for, when the fire of life is very low and the flame flickering, we must not blow too hard or too suddenly, for fear of blowing it out. Com-



men sense, in these matters is better than a code of fixed rules.

And now let us deal with the most important consideration of all, that is, the question of amputation; and here, again, let us call into requisition the experiments in the physiological laboratory before mentioned.

Excitation of the cerebro-spinal system causes the symptoms of shock. Continued or repeated violent excitement completely exhausts the nervous centres beyond the capability of renewed nutrition and function—hence the great danger accruing from the repeated shock of an amputation.

In a former paper, read before this Society, to which this is a supplement, I presented to your notice cases to shew—and others were related by gentlemen who took part in the discussion—that the dangers resulting from the sloughing of a limb were not so great as is generally apprehended, provided measures were adopted to insure complete external drainage, by removing the parts as close to the living tissue as possible, as soon as death was declared in them by loss of sensation. I pointed out that, contrary to the received opinion, sloughing does not extend above tissues actually crushed and killed in the injury, and that a slough, extending through the whole substance of a limb, was no more grave a condition than sloughing of the flaps after amputation, many cases of which recover. I contended that the danger resulting from the repeated shock of the operation was greater than the dangers from blood contamination, and that of two evils we should choose the least.

The very high mortality after major operations for railway injuries forces upon my mind the necessity of a trial of some other means; and, while I am bound to treat with all respect the opinions and practice universally acknowledged by the profession, yet we are each alive to the fact that our science is not perfect, and that many opinions which, at different times have held sway as dogmas in medical belief, are now obsolete.

However extensive, it is yet a narrow experience which knows only one aspect of a question. When, however, this is attended with great success, we are not justified in departing from what is proved to be good; but, if the record is dark, it is otherwise.

As physicians we are now often mere spectators of the interesting processes of recovery directed by nature's methods; and, as surgeons, we are learning to withhold a violent hand in many cases where active interference can only be productive of injury.

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*Vaginismus.* By FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P., London. Professor of Physiology, University of Bishop's College.

Read before the Medico-Chirurgical Society of Montreal, February 16, 1877.

Vaginismus, as described by Dr. J. Marion Simms, in his work on Uterine Diseases, is an excessive hyperæsthesia of the hymen and vulvar outlet, associated with such involuntary spasmodic contraction of the sphincter vaginae as to prevent coition. This irritable spasmodic action is produced by the gentlest touch; often the touch of a camel's hair pencil or fine feather will produce such agony as to cause the patient to shriek out, complaining at the same time that the pain is that of thrusting a sharp knife into the sensitive part. In some this is worse than it is in others. In a very large majority, the pain and spasm combined, are so great as to preclude the possibility of sexual intercourse. The sensitiveness seems to be at all parts of the vaginal outlet. It is very great at or near the meatus urinarius, on each side, where the hymen takes its origin—greater still, near the orifice of the vulvo vaginal gland, but often the most sensitive point is at the fourchette, where the hymen projects upwards. The most perfect examples of vaginismus that Dr. Simms has met with were uncomplicated with inflammation—but he has seen cases where there was redness or erythema at the fourchette. There has been in all, or nearly all, of his cases, a terrible sensitiveness of the *outer* surface of the hymen, and in not a few, a congested and irritable condition of the cervix-uteri; with, in occasional cases, polypoid excrescences about the neighborhood of the os tincæ. The treatment recommended by Dr. Simms—who, I may observe, was the first to draw special attention to this affection—consists in the removal of the hymen—incision of the vaginal orifice and subsequent dilatation. This last, without the incision, has been tried and found useless. Such, gentlemen, is briefly the description of an affection, fortun-

ately of very rare occurrence, which is capable of producing an amount of unhappiness, between married people who are too prudish to unbosom themselves. Not a few such cases are on record, where sexual congress, being utterly impossible, married couples—joined by the law, but with the marriage never consummated—have lived a most unhappy and very unsatisfactory life. In one case which came under Dr. Simms' notice, it was the groundwork of a threatened divorce. I have said that it is fortunate such cases are rare—and yet, it would be, perhaps, more proper to say—such cases, often from prudish motives, rarely come under the surgeon's notice. In 1866, when Dr. Simms published his work on Uterine Surgery, he had had thirty-nine cases of vaginismus, every one of which resulted in a perfect cure. In my experience I have only met with one case, which can, in my opinion, be classed under the term vaginismus, and I have thought that the details would prove interesting to the members of our Society.

On the 11th of November, 1874, Mr. S. consulted me with reference to his wife. Three weeks previously he was married to a young and handsome lady, of good proportions, but he had not been able to consummate the marriage. For a week after marriage he continued to make the most vigorous efforts to enter the vagina, but without avail, and they both came to the conclusion that there must be something wrong, and decided to seek professional service. As they desired my services they awaited my return from Europe. I arrived on the 10th of November, and, on the following day, as mentioned, the husband consulted me. I informed him that an examination of his wife was necessary, and he left, promising to return with her on the following day. On the 12th of November, the lady, accompanied by her husband, came to my surgery. I placed her on her back on a couch, and having oiled my finger well, with warm oil, attempted to make a vaginal examination. I had hardly entered the labia, when she drew herself up and complained of great pain. I continued to press onward, when my finger was at once stopped by intense spasm of the sphincter of the mouth of the vagina. I used a very considerable amount of force, but was quite unable to make a digital examination. I then attempted the introduction of a small-sized bougie, well-oiled, but completely failed; and

the suffering was extreme. She was, I saw, becoming hysterical; I therefore desisted, informing her that I would require to examine her under the influence of chloroform. As she was expecting the catamenia the following day, she promised to return as soon as it was over. On the 25th of November the lady returned, accompanied by her husband. Assisted by Dr. Kennedy, (after much difficulty—fully two ounces of chloroform being used), I put her under its influence. On examination we found considerable redness at the fourchette. The hymen was obliterated, and its remains the "*caruncule myrtilforme*" presented an enlarged and inflamed appearance and were extremely sensitive, the patient requiring to be kept *completely* under the chloroform, to allow of their being touched, without pain. No difficulty was now experienced in passing the index finger into the vagina, which was found ample and capacious. On examining the os, by touch, it felt granular. A speculum bi-valve was introduced, and the following condition of things was observed:—The os and cervix presented a fungoid appearance—somewhat enlarged in its whole diameter, and was entirely denuded of its mucous membrane. It was very soft to the touch and adematous. The granules on its surface were of large size, of a deep red color, and intensely congested—bleeding freely on the slightest touch. There was not any purulent secretion observed on them, and their formation was apparently due to intense irritation, causing congestion of the capillaries and oozing of serum, which kept the surface moist. The os was small and round, but there was no secretion indicative of catarrh of the cervical canal. The solid stick of nitrate of silver was freely applied to the granules, os and cervix, and the patient allowed to return to consciousness. She was directed to syringe the vagina three times a day, with a pint of warm water containing one grain of sulphate of zinc to the ounce. A syringe with a very small nozzle was selected for her.

*November 26th.*—Patient has only partially succeeded in using the injection, owing to inability to get the nozzle into the vagina—very great pain following the attempt. Says, however, that she will persevere.

*November 27th.*—Same report as yesterday.

*November 29th.*—Is still unable to introduce the syringe, and will not promise to attempt it,

as the pain she experiences is frightful, and leaves her in a nervous condition for hours afterwards. To come the following day for examination.

*November 30th.*—Patient attended at my office to-day—Dr. Kennedy being with me. We attempted examination of the vagina without the anæsthetic, but the spasm was so great and the pain so intense, that it was impossible. Chloroform was then administered—it taking fully half an hour to get her under its influence—and as before, examination was made with ease. A speculum being introduced, the condition of the os seemed to be much improved. The solid stick of nitrate of silver was again freely applied. As the irritability and spasm, however, seemed to have its seat chiefly at the opening of the vagina, a special examination was made of this part. The *carunculae* were found to consist of several enlarged tubercles, thickened and congested. The slightest touch to these produced considerable reflex action, shrinkage of the patient and spasmodic contraction of the sphincter, though the patient was kept pretty thoroughly under the influence of the anæsthetic. As the enlarged *carunculae* were possibly the sole, or at all events the principal cause of her condition, it was decided to remove them at once. The vulvæ being held wide apart, they were effectually removed by a pair of curved scissors, a pair of tenaculum forceps being used to elevate them. As many as five or six large pieces were thus cut off; a few small pieces were also removed. There was considerable bleeding, which, however, was readily controlled.

*December 1st.*—Patient was very sick after the chloroform, and passed a restless night. There has been some slight hemorrhage from the cut surface. A fold of lins, wet with cold water, to be applied between the labia.

*December 3rd.*—Cut surface all but healed.

*December 7th.*—Cut surface completely healed. Patient says she can now get the pipe of the syringe half way into the vagina. Attempted a digital examination, which, after very great difficulty I accomplished—the finger being very firmly embraced by the sphincter vagina, and to a very considerable extent also by the vaginal walls. After considerable trouble I succeeded in passing into the vagina a duck-bill speculum; but the spasm was so great that I

could not possibly separate the blades, and as she besought me to withdraw the speculum I did so. To continue the injection of sulphate of zinc morning and evening; also to use two large injections daily of plain warm water.

*December 9th.*—Patient became unwell to-day.

*December 16th.*—Menstruation ceased entirely yesterday, and the patient informed me that, for the first time in her life, she had had a perfectly painless menstrual flow. This fact seemed to give her additional courage for the examination, for the relief at her monthly period had been so marked, that it amply repaid her for all she had gone through, even though nothing more should be accomplished. I assured her of the very great probability of a certain cure. I then passed—with some little pain and in spite of some spasm—the pipe or nozzle of a syringe into the vagina, and allowed it to remain for a few moments. I then took my duckbill speculum and attempted its passage. Owing to its size, the amount of spasm was greater, and the patient complained of much pain, and begged of me to desist, but I persevered, and in a moment or two had the satisfaction of finding it well into the vagina, and this time succeeded in opening the blades slightly. The condition of the os was greatly improved. The granulations had all but entirely disappeared, a few only remained which I again touched with the solid stick of nitrate of silver. The vaginal injections to be continued as before.

*December 19th.*—To-day succeeded in passing the speculum without much difficulty, and in opening the blades tolerably freely. Spasm greatly less, although some slight pain was complained of. Os almost healthy in appearance, only two or three small granulations remaining, which I lightly touched with nitrate of silver. Continue injections.

*December 21st.*—Examined patient again to-day. Not much difficulty in passing the speculum; os now looks quite healthy. To discontinue injections of sulphate of zinc, but to use warm water injections thrice daily.

*December 23rd.*—To-day passed a No. 10 rectal bougie, without much difficulty and with very little pain. Allowed the bougie to remain in for two hours.

*December 24th.*—Passed a No. 12 rectal bougie and allowed it to remain three hours.

*December 25th.*—Husband called to-day to say

that the previous night the marriage had been consummated, and that he did not anticipate further trouble, in which anticipation he was correct. On the 16th of October, 1875, I confined her of a fine healthy child.

In conclusion, I may say that Dr. Marion Simms has always been inclined to regard the affection as neuromatous. Dr. Alonza Clark, an able American pathologist, to whom Dr. Simms frequently referred the vaginismus hymen for examination, states however that he was never able to detect any enlarged nerve filaments running through it.

## Progress of Medical Science.

### LECTURES ON FEVERS.

BY ALFRED L. LOOMIS, M.D.

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(Phonographically reported for the *N.Y. Medical Record*.)

#### LECTURE VII.

#### TYPHOID FEVER (CONTINUED).—TREATMENT.

GENTLEMEN: We have already considered the antipyretic power of cold applications in the treatment of typhoid fever, and I will now call your attention to the antipyretic power of the sulphate of quinine.

When quinine is employed as an antipyretic, it must be given in large doses; the administration of two grains every two hours, or a larger quantity administered in divided doses within a period of twenty-four hours, will not act as an antipyretic; but thirty or forty grains must be administered within a period of two hours.

If the stomach is irritable, and you fear that a large dose will produce vomiting, ten grains may be given every half hour until the desired quantity has been administered.

Usually from four to six hours after the antipyretic dose has been taken, the fall in temperature will begin, and in about twelve hours it will reach its minimum height; then it will remain stationary from twelve to twenty-four hours. After the temperature has once been reduced by the quinine, its administration may be discontinued until the temperature shall again rise to 105° F. As a rule the temperature rarely ranges as high as before the quinine was administered.

This mode of administering quinine in antipyretic doses to fever patients rarely produces any symptoms of cinchonism, other than a transient deafness after the first dose. In a large number of cases the temperature can be kept below 103° F. by the sulphate of quinine; but in very severe cases it will be advisable, and sometimes it will be absolutely necessary, to

employ not only the quinine, but at the same time the cold baths. My rule is, after I have reduced the temperature to 101° F., or 102° F., by a cold bath, to administer an antipyretic dose of quinine, and thus delay the recurring rise of temperature. While the cold bath more rapidly reduces temperature, the effect of the quinine is more lasting; consequently, by making use of both of these reliable antipyretics during the first two weeks, you will be able to control the temperature during that time. After this period it is not safe to resort to cold baths; but when the temperature rises above 103° F., occasionally you may use the cold pack in connection with antipyretic doses of quinine.

If, during the third and fourth weeks, you fail to reduce the temperature by these means, administer during the twenty-four hours from ten to twenty grains of powdered digitalis—unless the pulse is very frequent and irregular—when its use is contraindicated. As an antipyretic, digitalis should be administered only when quinine is given. It seems to increase the antipyretic power of the quinine, but has little or no power when administered alone.

The use of all these antipyretic remedies must be persisted in until the desired end—the reduction of temperature—is accomplished: but the peculiarities of each patient must be studied, and these agents must be so administered as to suit each individual case.

You cannot trust to the judgment of nurses and attendants, but you must determine for yourself what are the requirements in each case.

The satisfactory results obtained by the systematic use of these remedies justifies their employment; but the exact rules which are to govern one in their use, as to manner and time, can only be determined by experience.

All careful observers are aware that great danger attends the prolonged high temperature, but it is still an unsettled question whether this danger is due to parenchymatous changes in the different organs, which some claim are the result of the high temperature, or to disturbance of the nerve centres from the same cause. Whatever may be the final settlement of the question, the beneficial results which follow the antipyretic treatment of fevers are generally admitted; and my advice to each one of you is, at the onset of your professional career to make yourself perfectly familiar with the use of these most important and reliable antipyretics.

If you can keep the temperature of your patient at about 103° F., during the first two weeks of the fever, you have accomplished the *first* and perhaps the most important thing in the treatment of this disease.

Towards the end of the second or during the third week, sometimes earlier, sometimes later, signs of failure of heart power begin to manifest themselves; the pulse becomes feeble

and irregular; at times the surface is cool and moist; the patient complains of a sense of exhaustion, perhaps is unable to turn in bed; the tongue assumes a dry, brown appearance, and the necessity of supporting the patient becomes apparent. This will bring you to the *second* important question in the treatment of this fever, namely, *what means shall be employed to sustain heart power*, or, as it is sometimes said, the vital powers of the patient?

When a patient, during the second or third week of the disease, dies from capillary bronchitis, pulmonary oedema, or suddenly passes into a state of coma, failure of heart power is the real cause of death.

In those cases in which, during the early part of the fever, you have been compelled to resort to a vigorous antipyretic treatment, during the third week, although the temperature may not rise higher than 101° F., the pulse frequently becomes extremely feeble, and reaches 140 per minute, the first sound of the heart becomes inaudible, muscular tremors, dry tongue, and all the phenomena which indicate failure of vital power, are present. Under such circumstances the use of stimulants seems to be urgently demanded.

There are a few simple rules which may guide you in the administration of stimulants in this fever:

*First.*—They should never be administered indiscriminately—that is, never give a patient stimulants simply because he has typhoid fever.

*Second.*—When there is reasonable doubt as to the propriety of giving or withholding stimulants, it is safer to withhold them, at least until the signs which indicate their use become more marked.

*Third.*—In every case, but especially when stimulants are not clearly indicated, watch carefully the effect of the first few doses. There are few whose experience in the treatment of typhoid fever is such as to enable them to positively determine, from the appearance of the patient, when the administration of stimulants should be commenced.

Should you commence the administration of stimulants, it is necessary to see your patient every two hours, and note carefully the effect produced. If you find the tongue becoming dry, the patient more restless, the delirium more active, the temperature ranging higher, and the pulse more and more rapid, you may be certain that stimulants are contraindicated. If, on the other hand, the pulse becomes fuller and more regular, if the first sound of the heart is more distinctly heard, or, if it has been absent, it has returned, if the restlessness and delirium is less marked, the tongue more moist, and the patient more intelligent, you may be certain that the time for the administration of stimulants has arrived. When you have commenced their use, it is of the greatest importance

that you administer them at stated intervals, especially during the night.

In a severe case of typhoid fever, a free administration of stimulants, just at a critical period (which may not last more than twenty-four hours), will often be followed by a refreshing sleep, and your patient may rapidly pass from an apparently hopeless condition to one of convalescence.

The *third* important thing to be accomplished in the management of typhoid fever patients is the maintenance of nutrition. You must bear in mind that the primary and principal effects of the typhoid poison are manifested in the changes which take place in the lymphatics of the gastro-intestinal tract. Experience has taught us that the enfeeblement of the digestive and assimilative powers, due to these glandular changes, which are manifest from the very commencement of the fever, renders the digestion of solid food impossible, and for a long time it has been the rule of the profession to allow typhoid fever patients only liquid food.

There has been and still is great diversity of opinion in regard to the special articles of diet best suited to this class of patients. Most medical writers and practitioners claim that beef tea is the proper diet for fever patients; consequently it is the rule to pour into these enfeebled stomachs a decoction of beef in such quantities as a healthy stomach could hardly tolerate, and which, in itself, has little or no nutritive element.

Others claim that gruels are far superior to animal broths, and advocate the feeding of fever patients with gruel made of barley and other farinaceous substances, to the exclusion of every other article of diet; yet gruels furnish few elements essential to the nourishment of a physical organization struggling against a subtle poison, and rapidly wasting with a burning fever, and starvation is the necessary result of a restriction to gruel diet.

There is no disease in which a waste of all the tissues of the body goes on so rapidly as in typhoid fever; and milk is an article of diet which furnishes the elements of nutrition necessary to repair this rapid waste, and there are not the objections to its use which there are against animal broths and gruels. Although there have been, and still are, in some quarters strong objections against its use as an article of diet in fevers, recently it has been regarded with more favor, and those who have had extended opportunities for testing its nutritive qualities have come to regard it as the only article of diet required by fever patients. In it we not only find all the elements required for repairing the rapidly wasting tissues, but they are in a condition to be most readily assimilated by the enfeebled digestive apparatus.

In order to make the milk more digestible, it may be diluted with lime-water. The lime-

water is an antiseptic, and allays irritability of the stomach and intestines. The quantity of milk is not limited; the patient may take all his stomach will digest—usually patients will take from four to six quarts in the twenty-four hours.

After the patient has passed into the fourth week of the disease, you may find it necessary to administer cream and the yolk of eggs in connection with the milk.

Having considered the three most important things to be accomplished in the management of typhoid fever, I now come to the treatment of the accidents of the disease.

*Diarrhœa.*—I have told you that diarrhœa is one of the common symptoms of this fever; but it is one of which medical writers have taken special notice, and for the relief of which different means have been employed.

Let us for a moment notice the chain of phenomena of which diarrhœa is a link. The poison which produces this fever unquestionably has a specific action upon the intestinal glands and lymphatics. It is here that we find the characteristic lesions of the disease, and it is scarcely questioned that the typhoid poison, to a great extent, gives entrance to the system

through these glands and lymphatics, and here produces its primary irritation. Following the irritation and inflammation of the follicles, other portions of the mucous membrane become involved, and we have a catarrhal inflammation of the mucous membrane of the intestinal tract. The necessary consequence of this is a diarrhœal discharge. Is this diarrhœa to eliminate the fever poison? Certainly not. It is simply an indication that these intestinal changes are going on; it is not due to the elimination of the typhoid fever poison, but to the inflammation which the fever poison has excited in the intestinal glands, and the subsequent intestinal catarrh. When the diarrhœa is present in the earlier period of the disease, it is better to let it alone. The question may be asked, will it not exhaust the patient? During the earlier period of the fever (the first and second week) the danger is very slight. It has been proposed to treat this diarrhœa, which makes its appearance early in the disease, with alkalies, bismuth, pepsin, etc. It is claimed, if these remedies be administered, diarrhœa can be prevented, or, if it already exists, that it can be controlled. Theoretically, I see no reason for employing alkaline remedies, for the diarrhœal discharges are always strongly alkaline, and, from clinical observation, I am convinced that bismuth, pepsin, etc., have little or no effect either in controlling the diarrhœa or in preventing the intestinal changes which produce it. When diarrhœa commences late in the disease (during the latter part of the third, or during the fourth week of the fever), it is of a very different character from that which occurs during the first and second weeks.

Ulceration of the intestinal glands, and perhaps sloughing, has been established, and in addition to the extensive local changes, there is a septic element which enters into the causation of the diarrhœa at this stage. Besides, the increased peristaltic action of the intestines, which attends the diarrhœa, favors an extension of the inflammatory processes to the peritoneum, especially that portion which covers the intestine, which corresponds to Peyer's patches. In view of these facts, the diarrhœa should be arrested or held in check. For the accomplishment of this, there is but one remedy which can be relied upon—that is opium. My experience is against the use of astringents. If opium will not arrest it, you may expect little aid from astringents combined with opium as they are usually administered.

The use of opium is objected to by some, who claim that it diminishes the power of the heart's action; but in this disease, when administered in small doses, it seems to me to increase rather than diminish the heart-power. It is acknowledged that opium, more than any other drug, arrests the peristaltic action of the intestines; and that is what we wish to accomplish when diarrhœa is present during the third and fourth week of typhoid fever.

*Tympanitis.*—You will recollect that the tympanitis, which is sometimes so troublesome a symptom in typhoid fever, is due to gaseous distention of the intestines. Some assert that this gaseous accumulation is due to fermentative processes going on in the intestines; consequently, that the use of antiseptic remedies are indicated, such as muriatic acid, chlorate of potash, pepsin, etc. When this has proved a distressing symptom, I have usually found relief to be obtained by the application of turpentine stupes to the abdomen. Some claim that if turpentine be administered internally from the beginning to the end of typhoid fever, that tympanitis and the intestinal changes which lead to it and to the diarrhœa are much less severe. I am confident that the turpentine treatment, as it is called, does not have the controlling influence over this fever which has been claimed for it; but I am also certain that it is our most reliable agent for the relief of the tympanitis.

*Intestinal Hemorrhage.*—Hemorrhage from the bowels in typhoid fever (as I have already stated) is a serious accident, and may cause death by producing a fatal exhaustion.

When it occurs early in the fever, usually it requires no treatment; but when it occurs during the third or fourth week, or after convalescence is apparently fully established, it must be arrested as promptly as possible.

The occurrence of severe intestinal hemorrhages may sometimes be prevented by keeping the patient in bed. A typhoid fever patient should not be allowed to get out of bed from



the beginning of the attack until convalescence is fully established. Especially is this of importance if the case is a severe one, and attended by symptoms that indicate extensive intestinal lesions.

When hemorrhage from the intestines does occur during the third or fourth week of the fever, at once semi-narcotize your patient by the administration of opium in small doses at short intervals. Absoluterest of the body must be insisted on, the patient must not be turned on the side or moved in bed, and an ice-bag should be applied over the abdomen. I doubt if any good results can be accomplished by the use of astringents, either by enemata or by the mouth, as it is not known that they even reach the seat of the hemorrhage, although gallic acid and the persulphate of iron are usually recommended in cases of intestinal hemorrhage occurring in typhoid fever. If the hemorrhage is profuse, it may be necessary to keep your patient under the influence of the opium for a week or ten days.

*Peritonitis.*—When perforation of the intestine occurs the case may be regarded as hopeless: death takes place usually within twenty-four hours; death occurs as the result of general peritonitis; no plan of treatment avails anything. If the peritonitis occurs without perforation, from the extension of the inflammatory process from the intestinal ulcers to the peritoneum, by bringing your patient rapidly into a state of semi-narcotism and holding him there for five or six days, you may prevent the extension of the peritonitis and save the life of your patient. Such a case you are to treat in every respect as one of localized peritonitis.

After recovery from an intestinal hemorrhage or a localized peritonitis in typhoid fever, be exceedingly careful about the administration of cathartics or enemata; either may jeopardize the life of your patient. The bowels will move spontaneously after a time, even though the use of opium be continued, and no harm will follow should two or three weeks pass without a movement from them.

When the stomach is irritable, the hypodermic injection of morphine is preferable to opium administered by the mouth. This is given to paralyze the peristaltic movement of the intestines.

*Bronchitis.*—I have already stated that catarrh of the larger bronchial tubes is present in all severe cases of typhoid fever. No special treatment is required for its management; but, if the bronchitis becomes capillary, great relief will be obtained from the application of dry cups to the chest and the internal administration of carbonate of ammonia. Vapor inhalations will also be found of service in severe cases.

*Pneumonia.*—The pneumonia which complicates typhoid fever in nearly every case is lobular in character. The signs which indicate

its occurrence are sudden rise of temperature, increased frequency of respiration, and the physical signs of localized pulmonary consolidation; cough and expectoration are rarely present.

Its occurrence is always an indication that stimulants should be administered. If they are being administered, they should be increased in quantity. To prevent or relieve the hypostatic congestion of other portions of the lung, which frequently accompanies pneumonic development, the heart-power must be increased, and the position of the patient changed.

*Laryngitis.*—For the relief of the laryngitis which occasionally complicates typhoid fever, a small blister may be applied on either side below the angle of the jaw, and the whole neck enveloped in a poultice. If these measures fail, and suffocation appears imminent, tracheotomy should be resorted to without delay.

*Subacute gastric catarrh,* occurring as a complication during convalescence from the fever, can only be managed successfully by giving the stomach rest as far as possible, restricting the diet to a single tablespoonful of milk at a time, and applying hot fomentations over the epigastrium.

*Bed-sores.*—The severer forms of bed-sores are the most intractable complications we have to combat. Fortunately, the severer forms are much less frequently met with under the more recent plan of treatment; and, if they do occur, they are superficial and limited to small spots. Scrupulous cleanliness is one of the principal means for preventing their development. So long as there are no erosions, the parts should be frequently bathed in spirits of camphor, and the points of attack should be relieved from all pressure. If the sores penetrate the integument, they should be frequently washed with a weak solution of carbolic acid, and afterwards covered with lint covered with vasaline.

The most unfavorable cases are those in which the point of pressure caused by the weight of the body becomes gangrenous. In such cases, by some a continuous warm bath is recommended. As soon as sloughing takes place, and the parts separate, they should be dressed with lint saturated with balsam of Peru and carbolic acid.

As has been already stated, diarrhoea is usually present in the early period of this fever, but sometimes there is constipation. The question arises, is the administration of cathartics ever admissible in typhoid fever? If so, what cathartic shall be employed? There is great diversity of opinion upon these points. One recommends the administration of rhubarb, another advises alkaline cathartics, and another would give calomel.

I shall consider these at my next lecture, in connection with the management of convalescence and the sequelæ of this fever.

# THERAPEUTIC MEANS FOR THE RELIEF OF PAIN IN GENITO-URINARY TROUBLES.

CATARRH OF THE BLADDER, however caused, is a disease in which the local symptoms are always more or less pronounced; these are distressing irritability, supra-pubic pain, pains in the sacrum, perineum, and thighs. The judicious use of the catheter is one of the most effective means at the command of the surgeon; because, whenever the slightest obstruction exists to the free passage of urine, there is the risk of the secretion being slightly decomposed, and consequently irritating to the lining membrane of the bladder; and so the original evil is liable to be aggravated. To insure a regular and complete evacuation of the bladder is, therefore, an important thing to begin with. Then we may remove morbid deposits by injecting warm water and washing out the interior of the viscus. This gives the patient great comfort. Increased benefit may be sometimes obtained, says Sir H. Thompson, by cautiously impregnating the water so employed with astringent or sedative agents, such as acetate of lead, nitrate of silver, and nitric acid.

To allay much pain Sir H. Thompson uses anodyne solutions of the extracts of conium, hyoseyamus, and opium. He recommends the following formula; dissolve 3 i each of the extracts of conium and hyoseyamus and 3 ss of the extract of opium in fl. 3 ij of proof spirit and fl. 3 xiv of water; of this solution add a sixth or a fourth part to fl. 3 iij of warm water for an injection to remain in the bladder five minutes; two thirds should be permitted to flow out, and the catheter withdrawn; the rest is retained in the bladder. On all occasions of washing out the bladder only two or three fluid ounces of liquor should be injected.

In VESICO-INTESTINAL FISTULA, to wash out the bladder occasionally with small quantities of tepid water contributes greatly to the patient's relief. Villous growths in the bladder may require a similar treatment, the injected solution being rendered slightly astringent. Cancer of the bladder may need opiate injections.

PAIN FROM VESICAL CALCULI.—Few agonies are more intolerable than those of stone in the bladder; and much investigation has been bestowed upon the local use of lithontriptics; *i. e.*, the injection into the bladder of chemical solvents of stone. Sir H. Thompson has not much praise for this method of treatment, and says that the solution, if strong enough to be of any use, endangers the coats of the bladder, and when diluted its action is extremely uncertain. Dr. W. Roberts speaks more encouragingly, but allows that the scope of the treatment is within rather narrow limits; and that it is applicable only in those cases of vesical calculi in which the urine is acid, the stone not large, and its composition known to be uric acid, or strongly

suspected to be such. However, Sir B. Brodie has shown that phosphatic calculi might be greatly reduced in size, if not dissolved, by injecting a weak solution of nitric acid. Dr. Hoskins used a weak solution of acetate of lead (*gr. i ad 3 i*) with a mere trace of free acid. With a phosphatic stone double decomposition occurs. Phosphate of lead (in the form of a fine granular precipitate) and an acetate of lime and magnesia are formed. Results of high practical importance may be expected from a prosecution of the same researches; and I may here allude to a detailed account of experiments made by the Rev. W. V. Harcourt upon himself. It seems probable that the solvent treatment judiciously carried out may prove a useful adjunct to lithotripsy; and there can be no harm in the free use of plain warm water, by introducing it through a double catheter, and keeping up a continued steam for half an hour every two or three days.

The surgeon's art is, after all, the most radical in the management of the pains and perils of stone in the bladder.

PAIN FROM ACUTE GONORRHEA.—For the painful irritation of acute gonorrhea a variety of soothing injections may be recommended. That which in my own experience seems most useful is composed of liq. plumbi diacetatis, glycerine, and lime-water. Glycerine of tannin is sometimes very efficacious. Extract of opium in solution may be added to either of these; and particular care is needful in the mode of application, as the efficacy of the lotion depends entirely upon its free and repeated application to the whole of the diseased surface.

PAIN FROM FIBROID TUMORS OF THE UTERUS is the cause of much suffering. Dr. Meadows points out that pain and hemorrhage are generally in inverse proportion to one another; and if pain predominate, the tumor will most likely prove to be subperitoneal. He recommends us to apply the anodyne remedies as nearly as we can to the seat of pain. Hence the employment of medicated vaginal pessaries, using as the basis of the pessary gelatine and glycerine in the proportion of one part of the former to four of the latter, and into this we can introduce atropia, conia, and morphia. When used per vaginam these medicines are more effective, and certainly do not produce so much constitutional disturbance as when given in other ways. Dr. Tanner used with the same object medicated pessaries, in which the butter obtained from the theobroma cacao nut was the material used for holding the drugs together; among the substances so applied were mercurial ointment, extract of belladonna, extract of conium, and iodide of potassium: and pessaries in which is incorporated the extract of opium or belladonna are employed for dysmenorrhea and "ovarian irritation" by Dr. Barnes.

INJECTIONS IN UTERINE DISEASES.—Injec-

tions occupy an important place in the treatment of painful uterine diseases, chiefly, however, as adjuvants to a higher class of remedies. Here again we find solutions of belladonna and opium to be of most service, and to these may be added liquor plumbi diacetatis, and perhaps dilute hydrocyanic acid. As simple emollient applications for relieving irritation, milk and water, linseed tea, barley water, and thin starch or gruel are very valuable. To allay the pain of ulceration of the os and cervix uteri, Dr. Lloyd Roberts uses very weak solutions of carbolic acid, on the ground that it possesses in an equal degree with the stronger caustics the property of changing the vitality of the tissues and dissipating inflammation and hypertrophy. I find the following lotion very serviceable in these cases:

Glycerin acid. carbol..... 3 ij;  
 Liq. plumbi diacetatis..... 3 iv;  
 Liq. calcis..... ad 3 viij.  
 M. ft. Lotion.

In the instance of a private patient afflicted with a soft bleeding cancer of the uterus, the assiduous use of this injection stopped for a time all pain and hemorrhage. Dr. Churchill says that he can relieve the pain of "corroding ulcer" of the uterus by the local application of such caustics as nitric acid, muriate of antimony, chloride of zinc, and iodine, even though it is impossible to get the ulcer to heal; while in "advanced cases" temporary relief may be obtained from vaginal injections of nitrate of silver.

**LOCAL USE OF VAPOR OF CHLOROFORM IN UTERINE DISORDERS.**—Dr. West has not much to say in favor of the local employment of the vapor of chloroform, even by means of Dr. Hardy's "very ingenious contrivance;" and he is equally disappointed with the effects of a stream of carbonic-acid gas. To the latter agent attention was first directed by Sir Jas. Simpson, who spoke of its results as uncertain, although in some cases the success that followed its use was striking and immediate. M. Bernard has obtained some decisively good effects in a few cases of uterine carcinoma, followed by a great improvement in the state of the womb, and by a partial cicatrization of the ulcer.

Acute inflammation of the vagina following labor should be treated with injections of tepid milk and water or of a weak solution of acetate of lead. Gonorrheal inflammation must be treated in a similar way.

**RELIEF OF THE IRRITABLE UTERUS.**—Dr. Graily Hewitt has graphically described the condition of a patient suffering from "irritable uterus," which he believes to be nothing more or less than a retroflexion of the uterus in an aggravated form. This state of things is to be remedied by reducing the flexion, and then all the symptoms disappear which arise from engorgement of the uterus, compression of the nerves which course through its tissues, and

stretching and dragging of the peritoneum. A mechanical element of treatment here comes into play, consisting in the application of a suitable form of pessary. The literature of uterine pessaries is of appalling magnitude; and the object of this treatise is to indicate principles rather than to delineate those details which can be learnt from the proper textbooks. Pessaries of convenient shape and size relieve other painful conditions of the uterus caused by misplacement of the organ.

**NEURALGIA OF FEMALE URETHRA.**—A desperate neuralgia sometimes afflicts the female urethra and orifice of the bladder. But very often what seems to be a pure neuralgic affection depends upon minute ulcers in the urethral mucous membrane. By an ingenious contrivance Mr. Ashwell washes the whole tract of membrane with a strong solution of nitrate of silver, and by this plan he cured a very severe case of the disorder. I obtained equal success in an exceedingly obstinate case by the passage of a soft bougie every night and morning.—*From John Kent Spender's Therapeutic Means for Relief of Pain.*

#### HEAT FOR THE RELIEF OF PAIN.

**ORDINARY POULTICES** are convenient vehicles of heat and moisture; and, as such, are constantly used for allaying local pain. "Poultices should always be applied as hot as they can be borne, and frequently changed, lest they become cold and hard." They are always soothing to inflamed tissues, and have a most beneficial influence on inflamed viscera when placed on the surface over the diseased organ. An acute pneumonia or a pleurisy is always relieved by the application of a hot and large "jacket poultice;" and we may try to relieve the suffering of a peritonitis or a pericarditis by the same plan. Over the peritoneum a poultice should be light and thin, and bran is a good material to make it with.

Dr. Ringer mentions poulticing as useful for acute rheumatism, lumbago, sciatica, pleurodynia, and myalgia. When a poultice is removed the skin should be covered with a piece of flannel, and the flannel covered with oiled silk; this after-treatment promotes free perspiration, on which mainly depends the efficacy of the method. Starch poultices are extremely soothing, and may be used for lessening the pains of open cancers, as well as the heat and inflammation of certain eruptions of the skin. A potato poultice for the irritation of scabies is favorably spoken of by Dr. McCall Anderson.

The pain of a maturing carbuncle or abscess is much diminished by hot small poultices. Linseed poultices are often applied to rheumatic and gouty joints; the heat and pain are generally mitigated thereby.

**FOMENTATIONS** with hot or tepid water (and with water medicated in various ways) are another vehicle of heat and moisture. Opium is the medicament principally employed, but solutions of many other

substances are useful. Flannel soaked in these hot fluids, and then moderately wrung out, acts like a poultice, and is much less weighty to tender parts; some impervious material should be put over the hot wet flannel. Spongio-piline is convenient for this purpose. Painful spasm of internal organs, such as intestinal, renal, and biliary colic, may be most advantageously treated by one of these methods.

The pain of phlebitis in one of the limbs is exceedingly well treated by hot water dressing, which should be covered with gutta-percha tissue, and retained by a few turns of a bandage.

The distress of an acute fit of asthma is moderated by steeping the whole chest with flannel wrung out of water as hot as can be borne. Toothache is relieved by washing out the mouth with hot water.

Many forms of headache (including those of the acute specific diseases) are considerably benefited by sponging the forehead with hot water, or by even dipping the whole head into it.

For hemorrhoids attended with irritation and pain, relief is often obtained by sitting over the steam of hot water for fifteen or twenty minutes, and immediately applying a bread and milk poultice. *Pruritus genitalium*, and so-called prurigo of any other part of the body, is alleviated by frequent fomentation with hot water.

The process called "wet-packing" is very much to be praised for its efficacy in soothing myalgia and chronic rheumatism.

The good which is effected by hot poultices and hot water is due somewhat to their properties as counter-irritants and "derivatives;" and from this point of view we may proceed to study the action of

TURPENTINE, the oil of which is often most useful in quieting nerve-pains. A flannel steeped in hot water, and then sprinkled with the oil, is an old and excellent application to the chest during a paroxysm of asthma and *angina pectoris*. Great relief is often afforded in spasmodic affections of the bowels (particularly cholera) by the use of turpentine fomentations to the abdomen. Turpentine stoups, as they are called (prepared as directed just now), notably allay the suffering of some inflammations of thoracic viscera. Some continental writers speak of turpentine as a good external application for the pain and swelling of acute rheumatism; but this use of the drug is not to be commended. An equal quantity of yolk of egg and turpentine is a convenient mixture, and should be dabbed on the skin with a piece of sponge. Dr. Ringer reminds us that as the smarting arising from the application of turpentine goes on increasing for some time after its removal, it should not be kept on longer than just sufficient to excite a moderate degree of pain.

WARM AND HOT BATHS are admirable remedies for pain. They mitigate or even take away the pain of some internal spasmodic affections—such as biliary, renal, and intestinal colic. With regard to the general object of the relief of pain, the Bath thermal waters have an immemorial value. The action of these waters, and the ingenious appliances for utilizing them, deserve a special and local study: the Bath

waters, says a writer of the last century, "are a medicine, consisting of many ingredients exquisitely united together by the inimitable chemistry of nature." Local pains of various kinds, especially lumbago and the aches of muscle-fatigue, are easily and pleasantly cured by soaking for twenty or thirty minutes in water the natural temperature of which is above 100° Fahr. Movements of the body in the water increase the therapeutic value of the bath; and its salutary effects are developed more quickly by the hot water being put in motion, *i. e.*, by a douche being directed on the painful part. As a matter of daily experience, recognized particularly by the professional staff of the Bath Mineral Water Hospital, the torments of lumbago and sciatica are often completely removed by frequent and systematic bathing, assisted by a douche at the same time. What is quaintly termed "dry pumping," or the "dry douche," consists of a stream of thermal water directed on the dry subject, *i. e.*, a person outside the bath; and this is applicable whenever there are specific reasons (such as the existence of visceral disease) why a patient should not bathe. In the last century there was no scientific discrimination of gout, rheumatism, and rheumatoid arthritis; but all sufferers from these diseases were submitted to the healing influence of the Bath waters, and generally with notable relief to pain. As a rule, no douching should be permitted on a joint which is painful from active inflammation, asthenic gout may be quickened into disagreeable activity, but there is an old consilatory saying that "Bath waters often cure by exciting fevers." "Palsies from pain" and dysmenorrhea are among the diseases for which several older physicians advised the Bath waters, in the form of either external or internal use.

The Buxton thermal water (the temperature of which does not exceed 82° Fahr.) has a considerable repute in the treatment of some painful varieties of rheumatism. Many foreign spas owe their fame to a natural thermal property.

Used judiciously as means of health and not of luxury, hot and warm baths may greatly relieve the suffering of colica pictorum, and we may recommend the same means for the pains and dangers of irritative affections of the kidneys and bladder, of inflamed and strangulated hernia, of spasmodic stricture of the urethra, and of inflammation of the uterus and uterine appendages. The irritation of general small-pox is alleviated by tepid bathing.

The distress of prurigo is much ameliorated by the daily employment of the tepid bath, plain or medicated.

The local thermal bath is used for a variety of purposes. The sitz-bath can be resorted to for any of the local pains just specified; and Dr. Graves ordered the feet and legs to be plunged in hot water for the removal of headache.

VAPOR BATHS are beneficial under proper circumstances; the torments of itch, of linehen ruber, and of prurigo are signally soothed thereby. Dr. Macartney prescribed the topical use of vapor as a soothing application for painful wounds, contusions,

and fractures. A stream of warm aqueous vapor relieves otalgia; a funnel should be inverted over a vessel of hot water, and the external ear-passage applied to the orifice of the funnel. Vapor baths can be impregnated with sulphur.

The Turkish bath has been described as combining many of the properties of the hot and cold bath; and it is used for lessening the pain of rheumatism, gout, and sciatica. Dr. Ringer claims the superiority of the Turkish bath in cases of the following kind: a patient complains of slight and fugitive pains; the joints, but little swelled, are merely stiff, and some what red and hot. The gout often affects many external and internal parts in succession; and in spite of careful diet and abundant exercise the patient may be seldom free from some evidence of gout. After a few baths the pains and swelling disappear, the joints become supple, and the general health improves. As a prophylactic against gout, I am delighted with the occasional effect of the Turkish bath.

When the regular Turkish bath is not available, a domestic modification may be substituted which is equally potent in promoting sweating. Dr. Nevins uses a form of steam bath for the treatment of acute rheumatism, and I know nothing more efficacious for the painful pyæmic complications of scarlet fever.

DRY HEAT is applicable in many ways. Natural warmth and dryness of the atmosphere relieve a host of pains in some people, and it is unfortunate that we have so often to supply these qualities in our climate by artificial means. Hot dry flannel or sand is part of the armamentarium of every nursery, and is often tried for neuralgia and spasmodic pain. Bottles of hot water may be applied to the abdomen to relieve spasmodic pain, and hot bran and hot bricks are used for a similar purpose. Dry wadding or cotton wool is a simple method for preventing or curing rheumatism by maintaining an even temperature of external parts.—*John Kent Spender's Therapeutic Means for the Relief of Pain.*

#### DIPHTHERIA.

By DR. ROBERT BELL, F.F.P.S.G., &c., Glasgow.

Perhaps the most difficult problem in medical science which remains to be solved is that which relates to the causation of zymotic disease. All are certainly agreed that each infectious disease is due to a specific poison which, by one way or another, gains access into the body of its victim; but what the nature of the entity is, and in what manner it enters and attacks the human subject, is still a mystery. I say, in what manner it enters the system of the patient is still not understood. I feel convinced that too much has been taken for granted, and accepted as fact on this point; and I am certain it will not be until this question has been satisfactorily settled that we shall arrive at correct conclusions as to the nature of the different poisons which we call contagia. It is all very well for us to assert that the disease-producing essence is inhaled by the breath, and thus gains access into, and produces its baneful effects upon, the individual. I hold that

we have no proof of this theory being correct. It was at one time thought that typhoid fever was infectious; that it was by inhaling the poison in the process of breathing the disorder was contracted. I feel that those who have had most to do with the treatment of this malady will agree with me that typhoid is not infectious in this sense. Other instances might be cited, showing that our opinions on this important subject have recently undergone considerable change. In diphtheria especially, it appears to me that our conceptions with regard to the mode ingress of the poison are very far from correct, and will not yield the fruit which we must desire to reap; viz., an effectual means of destroying the disease, and thus saving the lives of our patients. Some years ago, it struck me that, when diphtheria attacked a patient, the *modus operandi* was the following. The germs of the disease become so located on a surface which provides a favorable soil for their development and multiplication, just in the same way as the germs of typhoid select the mucous membrane of the bowels. In this disease under discussion, the locality chosen by the poisonous particles is the throat and the neighbouring mucous surfaces. Here these *materies morbi* implant themselves, becoming attached by the tenacious and viscid secretion of the tonsils, the warmth and moisture of the part favouring their further development and progress. A dense fungoid growth is the result, at first of limited extent, but gradually encroaching upon the surrounding healthy mucous membrane. The very presence of this deposit—I refrain from calling it an exudation—results in inflammation of the subjacent and surrounding tissue. We may, and often have, a diphtheritic deposit without the slightest constitutional disturbance. I have often seen diphtheria in its early stage without the general system having apparently been affected in the slightest degree; and I venture to say that diphtheria, in its incipient stage, rarely affects the general health. Moreover, if the patient be strong and robust, some time will elapse before constitutional symptoms will manifest themselves. On the other hand, if the victim be weakly and in feeble health, or if his vital energies have been laid low by breathing foul gases the disease will run a rapid, and in general a fatal course. From what has been said, it will be perceived that I conclude diphtheria to be, in its first stage, purely a local disease, exactly as a chancre, as its commencement, is syphilis in the part only, not having yet affected the general system; or, to take another example, just as vaccinia, in its primary stage, is purely a local lesion. Another example may be cited: viz., the snakebite, which, if caught in time, may have its venom limited to the part bitten. It is, therefore, in this stage of the disease that an effectual and speedy cure can be guaranteed. When, however, the disease has for some time established itself on the tonsils, poisonous matter from the film becomes absorbed, first by the lymphatics, as indicated by the hardening and enlarging of the neighbouring glands, and then the general system becomes impregnated, and it is at this time that the



greatest danger threatens the patient; the vitality becomes reduced, and the poisonous film spreads with increased rapidity, the poison becoming multiplied with most deadly speed within the body. The above conclusions have been gradually arrived at after carefully observing a large number of cases of this dreadful disease. It is now time to say a word or two on the nature of the deposit, which is the principal feature of diphtheria. This always begins in one or more minute specks or points. These gradually enlarge to such an extent, and coalesce so, as sometimes to cover the whole area of the throat, and often the palate, posterior nares, and larynx. On its first appearance, it most closely resembles an aphthous spot, and indeed the aphthous and diphtheritic diseases bear a very close resemblance to each other in many ways. They both attack the mucous membrane of the mouth and throat; their appearance to the eye is similar; they both indicate a weakened condition of the general health; they are both fungoid in their nature; and I am not sure whether the one may not degenerate or merge into the other. Bearing these points in mind, it is always a safe plan of treatment to destroy in the early stages any deposit of a suspicious appearance on the tonsils or other surface of the throat; and it now remains to be seen how this can be accomplished. If what has been said anent the nature of the film, and the portal by which the disease enters the circulation, be correct, it follows that, if we can destroy the poisonous quality of the film while the disease is yet local, we keep it in that condition, and prevent its further effect on the health of the patient.

I may premise my remarks on treatment by stating that, since I have adopted my present method, I have only lost two cases from this disease; and these were children who resisted me to such an extent, that it was absolutely impossible to apply the treatment at all. It has been my lot to treat a large number of patients suffering from this disease, and it is with gratitude that I say with almost uniform success. My first consideration is to view the disease as one entailing rapid and severe prostration. This thought impels me to insist on free stimulation and plenty of nourishment, in the shape of soups, jellies, and milk, and this from the very onset of the disease, so as to assist the *vis medicatrix nature* to combat successfully the disease, and, if possible, expel it from the system. The grand aim is to endeavour to prevent the vital energies from succumbing to the fearfully prostrating effect of the poison. This dietetic treatment must be simultaneous with local and general medical treatment; but the most important, in my opinion, is the local application of substances which destroy the poisonous properties of the deposit on the throat. This consists of carbolic and sulphurous acids along with the liquor ferri perchloridi. My application generally consists of carbolic acid, one part: sulphurous acid three parts, solution of perchloride of iron and glycerine, of each four parts. This is either applied with a large camel-hair pencil, or by means

of the spray-apparatus, at intervals of two hours. The mouth should also be frequently rinsed out with a weak solution of Condry's fluid in water, and the following mixture taken in dessert-spoonful doses every two hours:—R. Potassæ chloratis 3 iij; acidi sulphurosi 3 iijss; tincturæ ferri perchloridi 3 iij; glycerini 3 i; aquæ q. s. ad 3 vi. M. In this way, a medicament is applied to the throat every hour, and, to be successful in curing the disease, this energetic treatment is absolutely necessary. Of course if the patient be sleeping, the usual rule must be observed; viz., never disturb a patient if asleep.

In conclusion, I may remark that the presence of albumen in the urine must not be looked upon as a necessary symptom of diphtheria, as it often does not manifest itself till far on in the disease; and, on the other hand, I have often observed albuminuria as a concomitant of ordinary sore-throat. It should also be remembered that, at certain periods of the day during the progress of digestion, albumen can often be detected in the urine when no disease is present.—*British Medical Journal*, Jan. 29, 1876, p. 131.

#### TRACHEOTOMY IN DIPHTHERIA AND CROUP.

Whatever may be the outcome of the investigation instituted by the Royal Medical and Chirurgical Society as to the identity or non-identity of membranous croup and diphtheria, there will remain the fact that each of these diseases, or each of the varieties of the same disease, as the case may be decided, tends to kill rapidly by suffocation; and that this suffocation is due to two causes—first, to the mechanical obstruction offered by the diseased state of the mucous membrane; and secondly, to the laryngeal spasm excited by this diseased membrane.

In this respect, at least, the membranous croup of Home and Cheyne is identical with the tracheal *diphthérite* of Bretonneau, albeit the former is sporadic, and the latter epidemic—a point of difference upon which much stress has been laid. While, however, it is certain that membranous croup in the great majority of cases is a sthenic disease, which kills by suffocation, and not by the vital depression it produces, diphtheria, though it often resembles croup in its sthenic character, is, it must be confessed, frequently asthenic, and kills by its own intensity and virulence. In such cases, tracheotomy is out of the question, for no one would think of performing the operation when danger to life lies in a general infection of the system and not in the local lesion of the air-passages. Excluding, therefore, from our consideration those cases of croup and diphtheria in which death is threatened by exhaustion, it ought, we think, to be regarded as a rule that the physician should advise, and the surgeon encourage, the performance of tracheotomy in these diseases when it is seen that medical treatment alone is clearly failing.



There are some—perhaps not a few—who would object to this on the grounds—first, that apparently hopeless cases do sometimes recover; and, secondly, that death is sure to follow tracheotomy, either from an extension of the disease itself, or as the result of the operation, which has dangers of its own. Indeed, it is well known that some surgeons affirm the operation to be unjustifiable; while others, without going so far as this, deny the validity of any favorable arguments drawn from statistics, because, as they aver, the operation in the successful cases was performed so early that it cannot be said that recovery would not have occurred without it; or they dispute the nature of the disease, and declare that the successful cases were not membranous croup at all, but laryngitic or laryngo-tracheitis.

With regard to the first objection, it is pretty certain that whatever may be the case on the Continent, and especially in France, where the operation is performed at a much earlier stage in the disease than elsewhere, English practice is entirely against it; for, as the result of our own inquiries, it is clear that the operation is not often, if ever, had recourse to in this country until all hope of recovery without it has been abandoned.

The time at which the operation ought to be performed is when the voice is extinct, and the difficulty of respiration continues and increases, when the skin is becoming livid, the extremities are cold, and the anterior thoracic wall, especially the lower end of the sternum, sinks in on inspiration. It has been asserted by some of the advocates of tracheotomy that, in the absence or stridor, and when the chest-wall remains puffed out and the lungs seem full and distended, the operation is undesirable, as these signs, they say, indicate the extension of false membrane along the small bronchial tubes.

It may be questioned, however, whether these symptoms ought to contraindicate interference, for they may arise from an œdema or congestion of the lungs, the result of long-continued obstruction to respiration—a condition which, doubtless, impairs the chances of the operation, but does not render it useless, although it does suggest that the operation ought to have been earlier entertained. But the existence of congestion is no real contraindication; for its relief is facilitated by the increased freedom of breathing after tracheotomy.

Nor can the second objection be any longer supported, for many of the successful cases have occurred where undoubtedly there was false membrane present; and there are now numerous proofs that the false membrane can sometimes be removed by the surgeon, and sometimes expelled by the patient after tracheotomy has been performed. Indeed, it seems obvious, granting the presence of the membrane, that the best chance of getting it expelled is to open

the windpipe—for is not this the recognized practice with other foreign bodies in the air-passages?

Some months ago we instituted an inquiry, by which we acquired sufficient information to show that there is a fair proportion of recoveries after the operation, whether we look to metropolitan or provincial, English or Scotch practice. We collected altogether from hospital and private practice eighty-nine cases of unmistakable croup and diphtheria, in all of which tracheotomy was performed, and out of these thirty-six recovered, and fifty-three died: which means that two patients out of every five operated upon recovered—a success by no means insignificant when it is remembered that the operation does not cure the disease for which it is done, but only affords a chance of life by postponing or averting death.

In several of these successful cases the true nature of the disease was shown by the escape or removal of false membrane. Last year we published (*Medical Times and Gazette*, July 17) a successful case by Dr. W. Richardson, of great value and importance, in which this occurred; quite recently another case, illustrating the same fact, was brought before the Medical Society of London; and in another column will be found the detailed reports of two similar cases, which have been recently under treatment in the Middlesex Hospital, in each of which tracheotomy was followed by the expulsion of false membrane and recovery.—*Medical Times and Gaz.*, Nov. 25, 1876.

#### ON SLEEPLESSNESS,

By DR. J. MILLER FOTHERGILL, Assistant Physician to the West London Hospital;

[After reviewing the different forms of sleeplessness, Dr. Fothergill passes on to consider the chief forms of hypnotics in common use.]

To take opium first. Its use is rather indicated in conditions of insomnia which take their origin in pain. When there is vascular excitement present it is desirable to combine with it direct depressants of the circulation, as aconite or antimony. The subsequent cerebral anæmia induced by the resort to opium is not so pronounced as is that induced by chloral.

Hyoseyamus takes its place alongside of opium, and may be resorted to in cases where opium or morphia disagrees, as in cases of chronic renal disease. For this last class of patients the tincture of hop is often very serviceable, though now rarely prescribed; it is a very satisfactory agent in such cases.

Hydrate of chloral is comparatively valueless in sleeplessness due to pain, and is inferior, in this respect, it is said, to the croton-chloral-hydrate. It is, however, very useful in conditions of vascular excitement, either alone or in combination with opium. In the delirium of acute pyrexia in children it may be usefully combined with the bromide of

potassium. In cases of sleeplessness where there is a sustained high blood pressure, or where there is distinct pyrexia, chloral hydrate is the hypnotic *par excellence*. It is, however, decidedly to be avoided in cases where the inability to sleep is due to worry and to brain exhaustion. In such cases, as in melancholia, the cerebral anæmia which follows its use is most objectionable and mischievous. It amounts to brain starvation," in fact, and the persons so affected are reduced to a pitiable condition. The persistent resort to chloral hydrate is most disastrous in its consequences, and the temporary relief afforded by it is not to be set against its after effects.

Bromide of potassium has a decidedly sedative effect upon the brain cells; and the cerebral anæmia produced by its administration is rather due to its sedative action upon the cerebral cells, by which they attract less blood to themselves, than to its effects upon the circulation; though doubtless to some extent it does diminish the activity of the heart. Its special advantage lies in its utility, where cerebral activity is kept up by far away peripheral irritation, especially when that irritation lies in the pelvic viscera. It may be given alone, or with opium, or with chloral, according to circumstances; and may often be usefully combined with hyoscyamus in cases where opium is contra-indicated. Its constant use, however, leads to diminished brain activity, and to intellectual lethargy.

Chloroform is a most potent agent, and is rarely resorted to as an hypnotic until other means of attaining the desired end have failed. The dangers attendant upon its use are so great that it is only resorted to in dire necessity. It is, however, occasionally used as a narcotic by the profession, but more frequently by persons upon their own responsibility. This chiefly occurs in those subject to sudden and unendurable pain, when nothing but the narcosis of chloroform would be effective. Probably indeed in these cases, all other and less objectionable means of attaining relief have been tried and have failed. According to Claude Bernard, by combining opium, or rather morphia with chloroform, the sensory nerves and centres are affected ere the intelligence and the motor powers are much influenced. But with chloroform alone all are equally and alike affected. The danger of chloroform inhalation lies chiefly in the risk of an overdose being taken; as unconsciousness creeps on the motor power is involved, and then the amount taken may be, and too often is, far beyond what was intended. In another communication in the *Practitioner* will be found some account of a most ingenious apparatus, by which the supply of chloroform is cut off as soon as the motor power is impaired. If resort to chloroform inhalation cannot be avoided by certain sufferers, surely it is not objectionable from any point of view that the danger attendant thereupon be reduced to a minimum.

There is another hypnotic agent of undoubted potency, which cannot be overlooked in the present inquiry, and that is—alcohol. If there be any use of alcohol that is free from objection it is its use as

a narcotic in certain conditions. With many persons a dose of alcohol at bedtime is the very best nightcap they could possibly resort to. The cases best adapted to its use are those where there is mental worry and anxiety. In such states the first effect of alcohol in removing gloom and substituting pleasing sensations for unpleasant thoughts is eminently useful. A series of pleasant mental images are brought up on the mental horizon by its means, in place of the triste and sombre subjects which before its use occupied the foreground of the consciousness; and with such agreeable objects uppermost, the secondary effects come on, and the patient is wrapt in a refreshing renovating sleep. Probably the evil after effects of alcohol, so used, are less than those of any other agent which would achieve the same end. Unfortunately, however, commonly the very persons for whom alcohol would form the best hypnotic are those most opposed to its use; and where a full dose of alcohol would constitute the best remedy that could be resorted to, prejudice prevents its employment.

So much for the ordinary narcotic agents in common use.—*Practitioner*, Feb. 1876.

#### LACERATION OF THE PERINEUM.

By DR. JAMES YOUNG, Vice-President of the Obstetrical Society of Edinburgh.

The treatment of laceration of the perineum is one of the most important questions that can come under the notice of the obstetric surgeon. I propose to cite two cases, illustrative of the benefit of treatment by the interrupted suture, more to elicit discussion than for the purpose of bringing forward any new matter. The second case is almost unique in regard to the extent of the rupture, and likewise the result.

*Case 1.*—Some twelve months ago I was in attendance upon a lady in Maitland Street. It was her first confinement. The labour was protracted and difficult, requiring the use of the short forceps. I used very considerable strength in traction, but without the pendulum movement, and failed to extract the head. I sent for my friend, Dr. Charles Bell, who kindly came to my assistance. The forceps were again applied, and the pendulum motion, with powerful traction, was successful in delivering the patient of a fine, large, healthy boy; the perineum was torn, but not through the sphincter ani. The wound was carefully sponged, and brought together with the interrupted suture in three places in less than half an hour after the accident. The result was most satisfactory, and the patient made an excellent recovery. The ligatures came away in four days, and the wound was absolutely healed in ten, at every point. The usual rules were enforced.

*Case 2.*—To this one I would direct attention. On the 28th of June, 1875, I was summoned to see Mrs. M., æt. 35, a primipara. At 6 p.m. the os uteri was small (size of a shilling), although the patient had been in labour for twelve hours. I was again called at 6 a.m. next day, when I found the

first stage almost over, and the head presenting in the occipito-anterior position. The woman had been twenty-four hours in labour, and, as I considered it unjustifiable to leave her longer, I sent for the forceps. The vagina was hot, and the pains were becoming feeble. While under chloroform, I used steady traction during each pain, allowing the external parts time to dilate slowly. Notwithstanding every care, the perineum ruptured right along through the sphincter ani, and into bowel three inches, my whole index finger easily passing from bowel into vagina. When the placenta was expelled, and the uterus contracted, the wound was carefully sponged. The anaesthesia being maintained, the torn parts were brought together with the interrupted suture. Seven ligatures were used, which had been dipped in carbolic oil, and the wound was left in perfect approximation. The urine was drawn off every twelve hours. The thighs were tied together, and, by the administration of opium, the bowels were confined for six days. No local dressings were used. The patient made a perfect recovery; the wound healed throughout at every point; and on the fourteenth day she was left to her own care. Several weeks ago, I examined the patient by placing one index finger in the bowel, and the other in the vagina, and found the recto-vaginal septum complete. Let me here mention, in connection with history, that when Mrs. M. was married, I understood that perfect sexual intercourse was precluded for some months in consequence of the extreme rigidity of the vagina, and four years elapsed ere this child was born.

*Remarks.*—1st, Causes of laceration of the perineum; 2nd, Means of prevention; 3rd, General rules of treatment. Many obstetricians will agree with me in saying that, in numerous primiparous cases, the perineal portion of the vaginal mucous membrane is frequently ruptured, and only heals by leaving a sulcus, which rather favours than hinders future labours. Among the causes of perineal rupture might be enumerated, 1st, When the age exceeds thirty years; 2nd, Cases where the head of the child is very large; 3rd, Malpresentations; 4th, A small or deformed pelvis; 5th, The use of forceps; 6th, A rigid perineum; each cause operating more especially in primiparous women.

*Prevention.*—I generally adopt the plan of having lard, butter, or cold cream, rubbed over the perineum during the extrusion of the head forwards. 2nd, Gentle dilatation of the external parts with the finger may be adopted during each pain; 3rd, Slow traction, when the forceps are used, and only during each consecutive pain; 4th, The application of the hand in supporting the perineum during strong expulsive pains; and when forceps are employed, during the delivery of the head, the left hand may be spread over the distended surface of the perineum.

*Treatment.*—In simple cases of laceration of the mucous membrane of the vagina, or even where the margin of the sphincter vaginae is torn, the only treatment necessary is mere cleanliness and sponging. I extremely deprecate, in any case, the use of

bandages, pads or plasters, as being more irksome to the patient than useful. In severe perineal rupture, as in Case 2, the immediate closing of the wound is of paramount importance, so as to secure healing by the first intention. The interrupted suture of carbolicised catgut should be used; and the entire rupture must be brought into exact approximation. Careful and frequent sponging must be attended to by the nurse, to avoid any irritation from the lochial discharge. The urine must be drawn off every twelve hours; no dressings applied; the patient kept in the horizontal position; the thighs kept together; and the bowels must not be allowed to move for six days.—*Edinburgh Medical Journal.*

#### EXTERNAL USES OF BISULPHIDE OF CARBON.

In the October number of the *Pacific Med. and Surg. Jour.*, E. J. Dorrington, M.D., gives the following directions for the use of bisulphide of carbon in the treatment of atonic ulcers.

"As a general rule it is not until several applications have been made that a change in the character of the ulcer becomes visible. It is best applied by means of camel's hair pencil, or a piece of charpie may be soaked in the liquid and squeezed upon the mouth of the bottle to expel any excess of the drug; then the charpie is lightly brushed over the surface of the ulcer, which is then covered with some mild unirritating powder, as sub-nitrate of bismuth or starch. It generally produces severe pain, which, however, lasts only a few seconds."

The writer also gives the following summary of the results obtained by him after an extensive use of the drug:

1. Bisulphide of carbon is particularly useful in all ulcers showing a tendency to spread, especially if of a syphilitic nature. It ought to be applied freely twice a day.

2. If no beneficial effect is observed after a trial with this drug for a week, in any class of ulcer, it will be useless to continue its further application.

3. It is by far the best local application thus far presented to the profession in the treatment of that large class of ulcers termed indolent or chronic.

#### A FORMULA OF ERGOTIN.

The following formula is offered by Mr. Charles L. Mitchell. He states that after numerous trials he can say that it yields a result in every way satisfactory:

R. Ergot, in fine powder..... $\bar{\text{f}}$  viij.  
Acetic acid..... $\bar{\text{f}}$  3 ij.  
Alcohol..... $\bar{\text{f}}$  3 iv.

Moisten the ergot with a mixture of the acid and eight fluid ounces of water; let it stand twenty-four hours; pack in percolator, and exhaust with water; evaporate to four fluid ounces, add the alcohol, let it stand several hours, filter and evaporate to an extract. Result about 480 grains; one grain is equal to eight grains of ergot.

## DIGITALIS IN SCARLATINA.

By DANIEL LEWIS, M.D.

NEW YORK.

The following suggestions on the use of digitalis in the treatment of scarlet fever, are offered at the present time, because of the prevalence of the disease in this city, as well as in many other portions of the country.

My attention was first especially directed to this subject by reading the clinical lecture on "The Principle of Physiological Antagonism as applied to the Treatment of the Febrile State," by Prof. Roberts Bartholow of Cincinnati. (American Clin. Lectures, Vol II., No. 1.)

His theory is based upon the demonstrated effect of the drug upon the pneumogastric nerve, which action he arranges as follows:

1. Contraction of arterioles and diminished blood supply. 2. Exudation checked or prevented by the heightened tonicity of the vessels. 3. Depression of the temperature. 4. Lessened action of the heart and increased power. 5. Arterial tension raised.

Since the pulse is very rapid in scarlatina, with high temperature, low arterial tension, and embarrassed secretion by the kidneys, the range of antagonism is complete.

Prof. Bartholow declares that, in a considerable experience in the treatment of scarlatina, he has found digitalis uniformly successful, and, taking in a group the ordinary cases of scarlatin simplex and scarlatina anginosa, it is the most efficient remedy we possess.

The chief dangers in such cases are the pyrexia and the consequent degeneration of tissues, and the catarrhal or parenchymatous nephritis, by which elimination by the kidneys is diminished or arrested. Digitalis obviates both these sources of danger by lessening the blood supply to the tissues, and increasing the water in the urine by raising the blood-pressure, and also by its direct action on the Malpighian tufts.

This particular effect of digitalis, in preventing nephritis and other glandular inflammations, has rarely been mentioned by other writers; but an article appeared in the *London Lancet*, January 23, 1869, by Dr. Sydney Fennel, in which he recommended it very highly for lessening inflammation by its effect in reducing arterial tension.

He has used it largely in scarlatina, and says that, when administered early in the fever, the inflammatory action in the glands of the neck subsides gradually. The fever leaves the patient in the usual time, desquamation is very slight, and the chances of chronic nephritis are reduced to a minimum. He also confidently asserts that the infectious character of the disease is lessened by the remedy, if not destroyed.

Thomas, in his article on Scarlatina in Ziemssen's *Cyclopædia* (Vol. II., p. 306), recommends

digitalis for reducing the frequency of the pulse, in doses of seven to thirty grains daily, according to the age of the patient.

I have used this remedy in thirteen consecutive cases of scarlatina.

The age of the youngest patient was ten months, of the oldest twelve years.

There was an abundant eruption in ten of the thirteen cases. Four patients had severe inflammation of the throat, with ulceration, diphtheritic exudation, and considerable glandular enlargement.

The temperature, when the treatment was begun, ranged from 103° to 106½°; pulse 120 to 148.

No suppuration of glands occurred in any case; the temperature was promptly reduced to 102°, or below; the pulse fell to 110-130, and there were no symptoms of nephritis except in a single case. In that one the digitalis had been discontinued, and on the fifteenth day there was a sudden rise in temperature, convulsive movements in the muscles of the left side, and a trace of albumen in the urine.

The digitalis was resumed, and in twenty-four hours all bad symptoms subsided, and the patient made a good recovery.

Four of the patients died; one on the second day, in which eruption was hemorrhagic; two with scarlatina anginosa, on the fourteenth and seventeenth days respectively, in which no physician was called till the fifth day, the immediate cause of death being asthenia; and one after four weeks, who, as I was told, had acute diarrhoea, although I was not again called to attend it.

I may add that otitis followed in three cases, but was so slight as to require little treatment.

The infusion of digitalis was the preparation used in all these cases, in doses of 3 ss. to 3 j. every four to six hours. The state of the pulse and temperature being the guides to the dose and period of administration, Prof. Bartholow insists that the genuine English digitalis should be used, and prefers the *infusion*, although a *thoroughly trustworthy tincture* may be employed.

The results of the digitalis treatment in my own cases have satisfied me that it is worthy of a thorough trial; and these notes are published with the hope that others may be induced to use the remedy, and, in due time, report their success or failure to the profession.—*N. Y. Med. Record Feb., 1877.*

#### PATHOLOGY AND THERAPEUTICS IN MEDICAL PRACTICE.

The following is from a late editorial in the *Lancet* :—

"The development in recent years, of the study of pathology, including morbid anatomy, has given a new turn to medical thought, and one which does not always tend to advantage as

regards the great purpose of medicine—the healing of disease. It is easy to see in many practitioners the pathologist rather than the therapist. They are so impressed with the belief that every symptom must have a physical basis, if not a basis in organic change of structure, that their enthusiasm spends itself in finding this out, or rather in looking for it. It is not at all inopportune, at the beginning of the work of another session, that we should examine a little this tendency of medical thought. It admits of such regulation as to be made serviceable to medicine, whereas, uncontrolled it is apt to be unfavorable in its influence on the practitioner. We may, in a preliminary way, glance at the explanation of this fact. As we have said, it is greatly due to the development of the study of pathology, which has resulted in the discovery of a physical basis in many diseases which it is difficult to alter or remove. The older physicians were not let and hindered as we are by considerations about the physical basis of disease.

“Besides the enormous development of the study of anatomy, healthy and morbid, one other discovery tended for a time greatly to discourage the therapeutical tendency of medical thought: we mean the discovery of much error in old methods of practice. The collapse of old theories of disease was naturally followed by the collapse of old theories of treatment. And, what made matters worse, before a new and rational system of treatment had time to be formulated, a system of therapeutics was advocated for the acceptance of the profession, or rather of the public, at once absurd and baseless. Add to this the prevalence of a sceptical habit of thought in regard to every department of belief, and we have ample explanation of the loss of interest in therapeutics which is sometimes charged against recent medicine.

“It is high time, however, to rebuke and discourage this quality in practitioners, whether general or consultant. It is the error of consultants rather than of general practitioners. The general practitioner has more human and permanent association with his patient than the consultant, who is apt to regard him as a collection of symptoms. The general practitioner, too, naturally puts a lighter and more functional construction upon symptoms than the consultant. But, to do consultants justice, interest in therapeutics is reviving again, and claiming the attention it demands. What makes indifference in this matter more inexcusable is the fact of the wonderful additions to our list of remedies and remedial resources in recent years, and to our knowledge of etiology, so that in scores of ways unknown to our forefathers disease may be prevented, controlled, or absolutely cured. So true is this, that of two men, one of whom has a little less faith in therapeutics and more knowledge of pathology, and the other

a little less knowledge of pathology and more faith in the resources of his art, the latter will be the more useful and successful practitioner. There need be no such distinction, There is nothing to prevent the best pathologist being the best physician. But the chief end of our studies is that we should be physicians.”

#### TREATMENT OF BOILS.

Dr. Ory (*La France Méd.*, 1876, p. 807) gives a summary of the various forms of treatment recommended by different authorities for furuncles. M. Savignac, besides mild purgatives, orders the following:

R̄ Sodii arsenait., 10 cent. (grs. 1.6);

Aquæ dest., 200 grms. (f̄ 3 vj, f̄ 3 iij. M.

Of this one dessertspoonful is to be taken before breakfast and tea, in a little water.

Furuncles are frequently observed in dyspeptics. In these cases alkalies are to be recommended: the waters of Vichy, Vals, etc., the bitters calumba and quinine, nux vomica and the like, are also of use, and plenty of outdoor exercise is advisable. Dr. Hardy has great faith in the prolonged use of tar-water (“goudron de Guyot”) in the dose of a dessertspoonful in a glass of water. Dr. Bulkley, of New York, has proposed the following as a prophylactic: hyposulphite of sodium grs. 25, three times a day in plenty of water. To be taken at meal-time. Dr. B. also recommends large doses of sulphate of quinine. Dr. Hall, of Cincinnati, suggests—

R̄ Tinct. arnicæ flores, 2 pts.;

Acid. tannic., 1 pt.;

Pulv. acaciæ, 1 pt.

A fragment of lint wet with this mixture to be placed upon the boil and changed every fifteen minutes until a coating is formed. This causes the throbbing pain to disappear, diminishes the tension of the integuments, causes the abortion of the boil, or, if too late for that, hastens the separation of the core.

#### PAIN PRODUCED BY CHLORAL HYDRATE.

Herbert M. Morgan writes to the *British Medical Journal*: “I have so frequently observed a peculiarity following the use of chloral which I have not yet seen recorded in any medical book or periodical, that I feel sure that it will be interesting for others, to describe it. In several cases where I had given chloral hydrate in ordinary doses (generally where it has been continued for several days at least), a feeling of pain is experienced all over the body, sharper than that of chronic rheumatism, and often so sharp as to make the patient beg for relief. In each case I have found no relief obtained until the chloral was discontinued. It seems to me to be a general hyperæsthesia of the cutaneous nerves, but sometimes localized in one particular spot. Tincture of gelsemium gives relief to the pain sooner than other remedies.”



## MILK DIET IN BLADDER DISEASE.

Dr. George Johnson, of King's College Hospital, in a recent lecture, alluding to the use of an exclusive milk diet in various forms of disease, such as chronic diarrhœa and dysentery, typhoid, and acute albuminuria, instanced some cases of bladder trouble in which amelioration followed rapidly after the free and almost exclusive use of milk. A young lady of seventeen had suffered for many months from severe attacks of pain over the bladder, so that during a period ranging from two to five hours, she would pass water every two, three, or five minutes. Opium pills and hot hip-baths afforded only temporary relief. Oysters or fish always brought on an attack. Her urine was acid, and contained pus. She was advised to try a milk diet exclusively, the use of hot hip-baths at night, and occasional opiates, which thus far were the only remedies that had given her relief. She also took some pills containing camphor and the extract of henbane. About nine months afterward she was fully restored to health, and the urine was perfectly normal, though she was liable to relapses, and then, upon resuming the exclusively milk diet for twenty-four hours, was again restored to her usual good health. Two other instances are given in which milk alone was given for chronic cystitis, and no other medicine whatever. In each case the cure recorded is absolute; and, after one case, the patient was able to resume ordinary plain fare and drink his wine at dinner as usual. The milk is to be taken cold or tepid, and not more than a pint at a time. With some persons the milk agrees better after it has been boiled. If the milk be rich in cream and cause heartburn, headache, diarrhœa, etc., the cream may be partially removed by skimming. The cream, however, overcomes the tendency to constipation. Dr. Johnson thinks that the milk diet will be made use of by surgeons who are contemplating lithotomy or lithotripsy, so as to lessen, as much as possible, the inflammation and catarrh resulting from the mechanical irritation of the mucous membrane of the bladder.—*Lancet*, Dec. 6, 1876.

## FOR THE TROUBLESOME COUGH OF PHTHISIS.

The following prescriptions are in use for the cough of chronic pulmonary affections, in the Charity Hospital, New York:

1. R. potassii brom., potassæ chlor., ammon. mur., of each  $1\frac{1}{2}$  dr.; syrup tolu 4 ounces. A tablespoonful every 2 or 3 hours.

2. R. tinc. opii camph. 1 oz.; tinc hyoscyami 2 dr.; tinc. belladonnæ, spt. lavend. comp., of each 1 dr. Ten drops on a lump of sugar every hour till relieved.

# THE CANADA MEDICAL RECORD

## A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D. L.R.C.P., LOND.

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MONTREAL, FEBRUARY, 1877.

### DR. HINGSTON, THE RETIRING MAYOR.

In a day or two His Worship the Mayor will lay aside the insignia of office which he assumed two years ago. As Dr. Hingston had, on several occasions previously, declined nomination to the Mayoralty, but yielded at length to the united request of the members of the medical profession, it would not be amiss that we should take a retrospective glance at his manner of discharging his public duties. The two years which have elapsed have been remarkable in the city's history. Montreal will not soon forget the intense anxiety which reigned during the several weeks that preceded the Guibord funeral. The citizens of Montreal of all classes, save those who gloat over riot and bloodshed, will ever remain grateful to Dr. Hingston for the tact, prudence, wisdom and loyalty with which he averted a terrible calamity at a most critical juncture. No man was ever placed in a position of greater difficulty or danger, or was hampered by more legal and sectional difficulties; but our worthy Mayor, by pursuing a straightforward but conciliatory course, regardless of political or party issues, carried out a measure in a way which left no sting in any breast, no exultation of triumph on the one side, no heart-burning on the other. The press of the country has already sufficiently chronicled his success. His personal influence was again tested last winter, when several thousands gathered at the City Hall—where they had smashed the windows a few months before—to demand bread or . . . . The Riot Act was, about to be read, when the Mayor appeared on the scene; went alone into the midst of the crowd; addressed to them a few words which evinced much sympathy but no fear, and ere his voice had died away the crowd quietly dispersed; a few hundred remained in the neighborhood, who craved permission to accompany him home, to prevent, as they said, wicked persons doing him harm.

The social duties pertaining to the Mayoralty are onerous and expensive, yet few visitors, entitled to that courtesy, passed through the city without being



invited to partake of our chief magistrate's hospitality. He was punctual in his attendance in Council, and never has there been greater decorum than during his period of occupancy. The unseemly brawls between Councillors themselves, and sometimes between them and the Mayor, never took place during his term, and in the one or two instances in which there was an appeal to the Council, the Council unanimously supported the decision of the Chair. He carries away with him the respect of the entire body over which he presided. The labor pertaining to the office seemed to be performed with ease, without sacrificing the claims of an extensive practice. Even the hospital received his daily visit as usual. But that for which Dr. Hingston accepted the Mayoralty, and for which he labored most energetically, was the establishment of a *Board of Health*; and of this *The Public Health Journal* thus speaks, Vol. II, p. 93 :

"When Dr. Hingston was elected Mayor, the health of the city was totally neglected (except what was done by ex-Aldermen Kennedy and Alexander). The Board of Health existed only on paper, and its by-laws have been only enforced a few times since its formation. After Dr. Hingston's election (which, by the way, was principally on sanitary grounds), he at once re-organized the Board. The health officers now know their duty, and are made to do it. The meat inspectors are made to make returns of the amount of meat confiscated, from whom taken, and what was the reason of such action; also all diseased animals are seized. The Sanitary Police are also compelled to make daily reports of the places visited. The Sanitary Inspector submits his report also, with the foregoing, to the Board of Health, at its weekly meetings. These meetings are held at 4.30 p.m., on every Wednesday, and are presided over by the Mayor. The business is gone through in an orderly and satisfactory manner, which other committees of the corporation should endeavor to imitate.

"There is a weekly mortality table also submitted; it is very complete. The diseases are all properly classified according to age, nationality and district. In fact, it is in such a form that scientific statisticians can, at a glance, compare it with documents of a similar character in other parts of the world. The citizens well know and appreciate Dr. Hingston's exertions as Chief Magistrate, but as President of the Board of Health, he has rendered services infinitely more valuable though not of so public a nature. While all our press in Ontario, and the Medical Associations on this continent are talking of the necessity of establishing Boards of Health for each state and province, Dr. Hingston has succeeded in establishing the Board of Health in this city upon a permanent basis. The work that is done weekly is of incalculable benefit, and the manner in which it is done is a model for others elsewhere. Besides the examining of reports, the Board has acted with a strong and vigorous will in a manner not before attempted. We refer to the ordering of drains through private property, when the interest of health demands it, and without any reference to expropriation. In this way work has, in some instances, been commenced within twenty-four hours of the time from the issuing of the order. Some may think that the Mayor has stretched his authority a little too far, but the citizens, knowing it is for the public good, are quite prepared to support him in his actions."

When a small-pox epidemic reigned in the city, and when the anti-vaccinators continued their mischievous teachings, Dr. Hingston, under cover of "A Few Instructions to Vaccinators," wrote a paper on

the disputed points in controversy, which effectually silenced his opponents. The paper was quoted all over this continent, and attracted notice in Europe.

Last autumn he was unanimously chosen by the Philadelphia International Medical Association—the largest and most important medical gathering the world has, perhaps, ever seen—representative for Canada, and Dr. Hingston attracted notice in the debates which took place. We copy from one of our October Exchanges, the following:—"The field-day in the surgical section was that which gave us the discussion on Coxalgia. Fancy a test between Gross and Agnew, of Philadelphia; Lister, of Edinburgh; Adams, of London; Hingston, of Montreal; Moore, of Rochester, and Sayre, of New York, and other less able, but not less earnest men! These gentlemen used no buttons on their foils."

At the Annual Meeting of the Canadian Medical Association in Toronto, in August last, our mayor was unanimously chosen president, and, at the meeting to be held here in September, will preside.

It has been a matter of surprise to many, how Dr. Hingston could attend to so many duties without appearing to neglect any of them. By utilizing the minutes and half minutes which so many throw away, and by punctuality in his every appointment.

Dr. Hingston at his first election received ten votes for his opponents one, and, at the second election, he was chosen unanimously. He had but to yield to the wishes of his friends to occupy again the civic chair; but, in his reply to the deputation headed by Sir Francis Hincks, he stated he had succeeded in doing his duty without sacrificing the interests of his patients, but could not hope to continue to do so without making calls on his strength and energy and purse which he thought unwarranted.

Montreal has had many efficient mayors, but, we say it without fear of contradiction, in education, gentlemanly manner, dignity of bearing, social standing, honesty of purpose and thorough business habits, the raps of our profession have, in Dr. Hingston, furnished one who, in those qualities requisite for the discharge of important public duties, will compare favourably with any who have preceded or may hereafter follow him.

DEATH OF SIR WILLIAM FERGUSSON, BART.—Sir William Ferguson, President of the Royal College of Surgeons and Sergeant-Surgeon to the Queen, died February 10, in London, at the age of 69. He was born at Prestonpans, East Lothian, Scotland, March 20, 1808. He received

his early education at Lochmaben Grammar School, and continued his studies in the High School and University of Edinburgh. He began his professional studies at the age of eighteen, under the noted anatomists Drs. Knox and Turner, the latter of whom occupied the chair of Surgery in the Royal College of Surgeons, Edinburgh. His progress was so rapid that in less than a year he became the confidential assistant of his learned and skilful preceptors in the preparation of their "subjects." He continued his intimate professional relations with Dr. Knox for nine years, and thus enjoyed opportunities for pursuing his favorite study—anatomy—rarely presented to the medical students of his day. He became a licentiate of the Royal College of Surgeons in 1828, and a Fellow of that corporation the year following, and in 1831 he began to lecture on the principles and practice of surgery. In 1836 he was appointed Assistant Surgeon to the Royal Infirmary, and was chosen a Fellow of the Royal Society of Edinburgh in 1839. A year later he removed to London, where he was made Professor of Surgery in King's College and Surgeon to King's College Hospital. He was chosen a member of the Council of the Royal College of Surgeons, London, and for some time was Professor of Surgery and Human Anatomy in that institution. For five years he was Examiner in Surgery at the University of London, and was chosen member of most of the medical and scientific societies of Great Britain, being a Fellow of the Royal Society of Great Britain, Vice-President of the Royal Medico-Chirurgical Society, a Fellow of the Obstetrical Society, and President of the Pathological Society. At the time of his death he was President of the Royal College of Surgeons. He was also Consulting Surgeon to the Hospital for Consumption and Diseases of the Chest, to the British Home for Incurables, to the Hospital for Diseases of the Throat, to the Scottish Hospital, to the Caldonian Asylum, and Honorary-Surgeon to the St. George's Hospital. He was also Surgeon Extraordinary to the Queen. Among his works he has left *A System of Practical Surgery*, and *Progress of Anatomy and Surgery in the Nineteenth Century*, which was published in 1867; besides special papers on Cleft Palate, Lithotomy, Lithotripsy, Excision of Joints, Aneurism, and other subjects.

Table prepared at the Health Office, showing total number of deaths from small-pox in the City of Montreal (exclusive of the civic hospitals) from January 1st to February 10th, 1877.

|                                  |    |
|----------------------------------|----|
| Under 6 months.....              | 12 |
| Above 6 months under 1 year..... | 12 |
| 1 year.....                      | 34 |
| 2 ".....                         | 14 |
| 3 ".....                         | 20 |
| 4 ".....                         | 11 |
| 5 ".....                         | 14 |
| 10 ".....                        | 4  |
| 20 ".....                        | 3  |
| 30 ".....                        | 1  |
| 40 ".....                        | 2  |

Total..... 127

*Nationality.*

|                       |     |
|-----------------------|-----|
| French Canadians..... | 115 |
| British ".....        | 9   |
| English.....          | 1   |
| Irish.....            | 1   |
| United States.....    | 1   |

Total..... 127

*Vaccinated and Otherwise.*

|                           |    |
|---------------------------|----|
| Vaccinated.....           | 11 |
| Unknown and doubtful..... | 43 |
| Not vaccinated.....       | 73 |

Total..... 127

Refused vaccination from public vaccinator. 25

*Sex.*

Males, 56; Females, 71. Total, 127.

*Re-vaccinations.*

Not a single case could be traced in which revaccination had taken place.

NITRIC ACID FOR HOARSENESS.

Dr. W. Handsell Griffiths says that a few drops of nitric acid in a glass of sweetened water, a couple of times daily, will be found an excellent remedy for the hoarseness of singers. One of the largest fees ever received by him—so he says—was for this prescription.

UNIVERSITY OF VERMONT, MEDICAL DEPARTMENT, AT BURLINGTON, VERMONT.—Miss Fletcher, of Burlington, has recently donated \$75,000 for the building of a hospital, and \$100,000 for the endowment of the same. The hospital will be the first institution of that kind in that State. This will give an opportunity for clinical study in connection with the College course, not enjoyed by any similar institution outside of our large cities.

CHLORAL FOR REMOVING WARTS.—A solution, containing about twenty grains of chloral hydrate to the ounce of water, is recommended by Dr. Craig, as being effectual for the removal of warts. The operation is said to be painless.

## Original Communications.

*Placenta Prævia.* By JAMES PERRIGO, M.A., M.D., M.R.C.S., Eng., Professor of Medical Jurisprudence, University of Bishop's College, Montreal.

Read before the Medico-Chirurgical Society of Montreal, March 9, 1877.

On Saturday evening, October 9, 1874, I was called to attend a Mrs. P., an English lady, living in Albert Street, a person for whose confinement I had been engaged. She had counted for October 6th. During pregnancy her health was unusually good, in marked contrast to two former pregnancies. The messenger came in great haste, and informed me that Mrs. P. was flooding frightfully and was in great agony. Immediately after arrival I made an examination, and, true enough, she was losing a good deal of blood. The "os" was dilated to the size of a fifty cent piece, was soft, and I could see was dilating rapidly. The placental edge occupied the right half of the "os," and it could be easily detected through the uterine wall. The pains were firm and strong, and were occurring in rapid succession. The membranes had not ruptured. Making the examination did not occupy me three minutes, and, during this time, the hemorrhage had ceased. Seeing then that the labour was rapidly progressing, and the patient and friends thinking that I had, by the examination, stopped the bleeding, I concluded to let nature have her course, merely watching for any return of the hemorrhage. At the end of half an hour, during which there was no hemorrhage at all, another examination was made, the os was dilated to double its former size, the bag of waters being very large, and more projected to that side unoccupied by the placenta. I ruptured the membranes, which were very thick and tense, and a perfect torrent of liq. amni came away. Only once have I seen such a quantity, it flooded the bed and went through the bedding on to the floor in a perfect stream. In passing my finger up as far as it could reach, I could see the placenta was detached that far, but could not make out whether it was wholly so or not. In passing the finger up, some hemorrhage occurred, but uterine pains coming on more strongly it ceased. In about one hour after the membranes were ruptured,

labour was completed, the placenta coming away immediately after the child. The child was a female, alive, and of the ordinary size, and appeared to be fairly conditioned. The mother conyalesced well, and was about in the usual time. This being my first case of Placenta Prævia, I congratulated myself on nature doing her work so well. The amount of hemorrhage before my arrival must have been considerable, but she did not appear to be much affected by it, but appeared to be more frightened by the expressed fears of the friends around her. The first thing she complained of was a gush of blood when at tea, and immediately after, uterine pains began and continued without intermission, to the end. The whole labour did not occupy five hours.

My next case was a French emigrant's wife, living in St. Elizabeth Street. I was called to this case by a midwife. She had been called in during the morning. Hemorrhage, to a slight extent, had occurred shortly before her arrival. No examination was made but rest was enjoined. The hemorrhage ceased almost as soon as it commenced, and the midwife left, leaving strict instructions that the bed should be kept. About two hours after, feeling a desire to pass urine, Madame Lescoi got up, and immediately the hemorrhage returned. The midwife was again sent for, and, in the evening I was sent for. Upon examination, the "os" was not open. Through the uterine wall a soft sponge mass was felt, but not so low down in the uterus as in the last case. Placenta Prævia was supposed, and action taken accordingly. Considering the amount of hemorrhage off and on during the day, it was considered best to plug. She complained of no pain at all, and told me she had yet three weeks to go according to her own counting. This was about nine o'clock in the evening.

A little after midnight I returned, and found she was beginning to complain of slight pain in the back. The plugs were taken out, and the "os" found in the same condition. No hemorrhage had occurred, as the plugs were only stained by the blood remaining in the vagina. I did not plug the cervix, but merely the vagina. The first plug was a large one and well placed in opposition to the "os," and supported by others placed in afterwards. Fresh plugs were placed as a precautionary measure, and I left her, with instructions to be sent for if her labor

began. Six o'clock next morning I was sent for, and found that labour pains had set in. The plugs were taken out, the two last being well saturated with blood. The "os" was now open to the size of a twenty cent piece, and the edge of the placenta could be easily felt. When the last plug was removed, and during the examination, the hemorrhage was considerable, and my patient began to feel the drain. The uterine contractions were weak and irregular, so no time was lost in rupturing the membranes, and the placenta, as far as the finger could reach, was detached. This last proceeding has the influence of Dr. Barnes in its favor, and it was considered the best under the circumstances. A dose of ergot and brandy was given, and, in a few minutes, the uterine contractions became firm and regular. The os dilated quickly, and, in about an hour, as there was a trickling of blood all the time, I applied the forceps and completed the delivery. Immediately after extraction of the child, there was a tremendous gush of blood, which placed the patient in the greatest danger. Bread and milk was given, and a dose of ergot. The placenta was taken away immediately, without difficulty, and the womb fortunately contracted well. The child, a female, and undersized, was still-born. Convalescence was slow, but eventually a good recovery was made.

In these two cases, as regards the safety of the mother was concerned, I was extremely fortunate in having the womb contract well after delivery, and also in the absence of a rigid os. You may ask me why I did not puncture the membranes in the first case, when I first made the examination. I did not do so, because there was no hemorrhage at the time, and then again, labour was progressing rapidly. With regard to the second, puncturing the membranes and applying the forceps as soon as the "os" was sufficiently dilated, will, I hope, have your approval, rather than the operation of turning. The next case I have to mention was a much more serious one. I was called to this one at eleven o'clock one night last August. It appears that this person, the wife of a stonecutter, had commenced flooding that morning, and their usual medical attendant was called in. Rest was enjoined, and there was some cessation of the hemorrhage. During the afternoon the hemorrhage became alarming, but there was no change in the management of the case, and no

vaginal examination was made. This continued till about ten o'clock at night, when the patient fainted, and the state of affairs was most critical. At this juncture, the wife of the medical attendant became suddenly ill, and he had to cease his attendance. A midwife replaced him. When I arrived and took in the state of affairs, I considered I had a hopeless case to deal with. The patient was in a swoon, no radial pulse could be felt, and the heart's contraction just perceptible. She was blanched like a sheet. The amount of blood lost must have been enormous, the bedding was saturated through and through, large pools under the bed, and great streams of it all over the floor of the bed-room. In consequence of her being in a faint, there was no hemorrhage at the time of my arrival, so that I began at once giving her brandy and milk, and made it the special duty of one person to do so. She soon came too, when the bleeding at once returned. Making a vaginal examination at once, I found the "os" dilated to more than a fifty cent piece, and dilatable. Passing the finger inside the "os" the placenta was felt centrally implanted and very adherent all round. Having warned the husband and friends of the great possibility of the patient's death, and having sent for assistance, and knowing there was no time to be lost, I perforated the placenta and turned. This did not take more than two or three minutes, but during the operation my patient again fainted, but from which she soon rallied. I did nothing more than simply turn, merely seizing one foot, bringing it and the leg down. Very happily for her, the uterus firmly contracted, and I considered this was the means of saving her life. After this, there was no further hemorrhage; indeed, if there had been, death would have been the result. During the whole time brandy and milk was administered, and the stomach retained it all. After turning, I gave her about twenty minutes rest, and then completed the delivery and detached the placenta. The two halves of the placenta were quite adherent, but, with care, it was all nicely brought away. The child, a male, as you might expect, was dead. When the whole operation was over, I still thought the woman would die, the pulse was flickering and could not be counted, and there was that feeling of suffocation always present during severe loss of blood. However, she recovered, but not till six weeks

afterwards was she able to leave her bed, and, even at present, has not recovered her usual state of health. Off and on she suffers a great deal from facial neuralgia. In delivering through the placenta I had no choice; there was no time to be lost, and to have followed the treatment most accoucheurs advise us to do, would here have taken too much time; I mean, the finding out the least attached part of the placenta, detaching it, and delivering by the side of it. In this case, the placenta was equally adherent, and to have followed that treatment would have taken too much time.

*Puerperal Convulsions.* By O. C. BROWN, M.D.,  
Acton Vale, Que.

If you think the following notes of three cases of puerperal convulsions worthy of insertion in the *Record*, I shall be glad if you will find a place for them, although they are very similar to other cases of the same kind, and there is nothing very new or original to communicate in regard to the treatment pursued; yet as I kept careful notes of them all through, and observed some symptoms, both before and after the respective labours, which agree with the remarks upon puerperal eclampsia in Cazeaux obstetrics, especially in regard to the urine, I think these cases perhaps worthy of being read.

Case 1.—Mrs. F. M., of the 10th Range of Actonvale, a French woman, sent for me on the 18th December 1875, she being in labour, as her husband informed me, of her sixth child. On my arrival at about 10 p. m., I found the patient walking about, in the first stage of labour, the os uteri moderately dilated, soft parts in excellent condition; bowels had been freely opened about two hours before my arrival, the patient having taken a dose of oil; bladder also empty; the patient vomited severely, and was continually using the chamber-pot to pass her water, which flowed in great quantities, the urine of a clear colour, and during my stay she must have passed eight or nine quarts, as she nearly filled the chamber-pot three times. The urine was of a clear, pale yellow color and upon using the simplest tests, heat and nitric acid, it gave albumen in large quantities, became very viscid on standing a short time, but was almost of a transparent color; she com-

plained of a headache, and had suffered for some time from pains in the loins and back, and general feeling of weakness. I administered some hydrate of chloral, and at 2 a. m., she was delivered of a female child weighing 9 $\frac{3}{4}$  lbs. I left her doing well, and the same day I went to see her, and met her husband coming for me, who told me she was in convulsions, she had suffered very much after I left from headache, and gradually became drowsy. I found her just recovering from a paroxysm, which was the fourth she had undergone. I administered sixty grains of the hydrate of chloral, and tried to ascertain if any clots remained in the womb, but everything appeared to be in good condition, and the discharge seemed normal. Another paroxysm coming on I put her under chloroform, and kept her under the influence of the anesthetic for thirteen hours, after which time no more convulsions occurred. I used the chloroform to complete insensibility, pulse when in that state being soft, rapid and somewhat weak, and the respiration easy. She suffered for some time after from loss of vision, Fronto-occipital headache and great weakness. For the blindness, I gave bromide of potassium in full and regular doses. She recovered completely.

Case 2.—Mr. X. came to me from Durham, towards the middle of September, 1876, and told me he should need my services in a few weeks, for his wife who was expecting her confinement. He said that for some time she had been passing a large quantity of pale-yellow urine, and stated it was most extraordinary the immense amount of water she passed daily, she had been troubled with pain in the back for some time, and was often confused and stupid and suffered from a severe headache. I ordered some quinine wine and iron, and told him to let me know how she got along. About the first of October, I was sent for to attend her, and found her in violent convulsions, pulse hard, quick and bounding; os slightly dilated and rigid, soft parts also stiff; child occupying the first position. As I always looked upon chloroform as the sheet anchor for rigidity of the os and eclampsia, I immediately put her under the influence of that agent until complete anesthesia was produced, and the pulse was soft and small. Under the chloroform all convulsions gradually passed away, she remained in this state until 6 a.m., about seven hours after my arrival, when

the os having fully dilated I effected delivery per forceps of a male child weighing  $8\frac{1}{2}$  lbs.; patient came slowly out of the comatose state, and could remember nothing, not even of the beginning of her sickness; after a little flooding and loss of vision, which last only went away after two weeks, she came round, and in a month was perfectly well.

In this case a bottle of urine left with me gave all the signs of albuminuria, the urine being viscid and frothy, and heat, nitric acid and other tests shewing albumen in large quantities; she also passed urine in abnormally large quantities for some time after.

Case No. 3.—Mrs. S. St. A., of Actonvale, sent for me to see her about latter end of January 1877; she was then about eight months pregnant, of her first child, (had incurred a miscarriage some time before, at 4 months, and had lost a good deal of blood). She wished to consult me about her water; was daily passing two to three chamber pots full, colour clear yellowish, and viscid, depositing upon standing, a yellowish sediment; I prescribed tonic medicine, and advised rest for the patient, and told her mother I feared she would have a very severe labour; that I dreaded puerperal fever, or convulsions. Upon testing the urine it presented all the characteristics of being highly albuminous.

On Sunday night, I think, the 3rd February, I was sent for, and on my arrival at 9 p.m., found her in labour, first stage, os slightly dilated; head in first position, and everything as regards soft parts, bowels and bladder all right; she was vomiting severely, I gave some chloric ether and paregoric; returned to my office, tested some urine which I brought with me, and found it similar to that of cases 1 and 2. Saw her again at 11.30 p.m., labour rapidly advancing, and at 12.15, she was delivered of a male child weighing 12 lbs. I left her in good condition, excepting some headache, for which I gave chloral hydrate. Monday the same day I went to see her, found her pretty well; had some severe after pains; had passed a great deal of water; discharge all right; complained of headache, pains running down the neck, gave bromide of potassium and left some chloral for the night. Tuesday morning I found her about the same, excepting she looked very much exhausted, in fact the look of weak-

ness and exhaustion surprised me, as she had not had a hard labour; I felt anxious and said I would return at midnight. I might add that the pulse and temperature were but little above ordinary; was called the same night about 12 a.m.; patient in violent convulsions and presented a frightful aspect, had undergone 4 attacks while they were seeking me; tongue badly wounded. I sent for Dr. Mignault, on my arrival, who advised injections of chloral; and I immediately administered an injection of 60 grains, with no effect; using the syringe brought on a paroxysm, which continued every ten minutes, (before they had occurred about every thirty minutes), I determined to give chloroform, and put her under its influence, and so she remained about six hours, when I gradually withdrew it, and as she shewed no signs of returning convulsions, I left her without it, and they never returned; and after eight days of total blindness; great exhaustion and headache, she gradually got better, and is now well enough, but very weak. I gave nothing but bromide of potassium for the loss of vision and headache. The milk came slowly, and she now nurses her child, but has not much milk.

The above three cases all presented the same symptoms before and after delivery, (1) intense occipito-frontal headache, pains radiating down the neck to the back, (2) severe vomiting before and during labour, and this vomiting was severe from the commencement of pregnancy, (3) the peculiar state of the kidneys resulting in copious secretions of highly albuminous urine, with pain in the back and loins and general weakness and hebetude.

Is the albuminuria dependent on the convulsions, or is the convulsions an effect of the state of the kidneys? Why do some women only suffer from these convulsive attacks, while the great majority remain free? Again, eclampsia does not belong to Bright's disease of the kidneys, excepting towards the last. Why does pregnancy call forth the eclampsia? Is there a certain state of the nervous system, of the blood, or a peculiar diathesis, which predisposes to eclampsia during pregnancy, and which only seems to manifest itself at that time by certain peculiar symptoms, such as convulsions, etc., etc., etc.?

I trust the above cases may be worth perusal, in the last only I succeeded in getting a consul-



tation. But in all I followed the same treatment. The tests for albumen were all of the simplest kind, no microscopic examinations being made. I do not fear eclampsia when I can administer chloroform, for I consider it the sheet anchor.

Actonvale, March 7, 1877.

## Progress of Medical Science.

### A NEW REMEDY, CALLED DIGESTINE.

By A. F. SHELLY, M. D., of Philadelphia.

This is obtained from the gizzard of the domestic fowl (chicken) and is a specific for vomiting in pregnancy. I have used this remedy for twenty-five years, and it has never failed. It is also the most powerful and reliable remedy for the cure of indigestion (dyspepsia,) and sick stomach caused from debility of that organ. It is useful in all cases where the pepsines and pancreatines are used, but with much more certainty of its good results, for it puts all those preparations, in my experience, in the background.

In complicated affections of the stomach, such as inflammation, gastralgia, pyrosis, etc., it may be combined with subnitrate of bismuth and opiates; and in diarrhoea and cholera infantum, with astringents, both vegetable and mineral. I have given the article to several prominent physicians, who have used it with the happiest results, among whom I may mention Professor E. Wallace, of the Jefferson Medical College; he gives me the result of seventeen cases as follows:—

In vomiting of pregnancy, out of nine cases he cured six, and palliated two, and in one case the remedy was not taken according to direction, and therefore had no effect.

He used it in seven cases of sick stomach caused by chronic inflammation of the uterus; cured five, and two remained doubtful. He also used it in a case of very obstinate sick stomach, caused by an irreducible hernia, and says this was the only remedy that gave any relief.

We, who have some experience, all know that vomiting of pregnancy is a sore affliction, and in some cases almost unendurable, nay, indeed, putting life in jeopardy; but in digestine we have a remedy which will prove to be a great blessing to mothers, who, as yet, think vomiting must be endured as a natural consequence.

If I am able, by this publication, to induce the medical fraternity to make use of the remedy, I am positive that a great boon will be

conferred upon a class of sufferers who claim our sympathy.

The dose is from five to ten grains, hardly ever more than five, except in obstinate cases. For children, from one to five grains. My mode of administering it is in a spoonful of water or tea, or it may be strewn on a piece of bread and covered over with a little butter; it is, however, nearly tasteless. In dyspepsia and in vomiting of pregnancy, I direct it to be taken half an hour or so before each meal. In other affections of the stomach and bowels, every two to four hours. I give it uncombined, except in complicated cases, as heretofore mentioned.

The methods by which this principle can be obtained from the viscous are various. When I commenced to employ it, I used it in rather a crude state, by pulverizing the lining membrane of the gizzard; but it requires too much care and precision in the drying and cleansing operation, in order not to destroy its virtues. There is also great inconvenience in obtaining the viscous during the heat of summer and extreme cold of winter, as temperature is one of the main things to be observed, in order to preserve its efficacy, purity and sweetness. Later, finding this mode of preparation unsatisfactory, and inconvenient for the above reasons, I consulted with Wm. R. Warner & Co., 1228 Market street, Philadelphia, who have prepared a form, designated digestine; its purity, and also its good effects I can vouch for.—*Philadelphia Medical and Surgical Reporter*.

### SULPHO-CARBOLATE OF SODIUM IN DIPHTHERIA.

BY W. E. ANTHONY, M.D., of Providence, R. I.

The object of this paper is not to give the clinical history of diphtheria, but to call attention to a remedy which, in the hands of those who have had experience in its use, has proved a great benefit in the treatment of this disease. I refer to the sulpho-carbolate of sodium. My attention was first called to it by a paper, read before the Rhode Island Medical Society, by Dr. C. H. Fisher, in 1875, in which he detailed his experience in its use and the formula for its preparation. I have notes of eighteen cases of true diphtheria, occurring within the past three months, in which I have used the remedy with satisfactory results in all but one case. The fatal case occurred December 11th, and was that of a delicate child, three years of age, the disease proving rapidly fatal in thirty-six hours from the time of invasion. While I do not consider the sulpho-carbolate a specific in this disease, I do think that its judicious and persistent use will, in many cases, be followed by an amelioration of its symptoms.

Just what its mode of action is I am not fully prepared to say. It is possible that it acts as an

antidote and eliminative to the peculiar blood poison which is the cause of the disease. It is a stable salt, parting with its acid only when brought in contact with the fluids of the body. In one case, where a large quantity had been used for several days, the odor of carbolic acid was plainly perceptible in the urine. The remedy may be used in every form and stage of the disease, in doses of from one to ten grains, repeated every one, two, three or four hours, according to the necessities of the case. The proportion of acid in the salt is about one-fourth, which will determine the dose.

I have given as high as one hundred and twenty grains in twenty-four hours, to a child seven years old. It may be combined with quinia sulph., tinct. ferri mur., ammonia carb., or given in brandy, whiskey, wine, syrup, or any aromatic water.

A very good way to dispense it to children is to mix it with sugar and let them eat it. For adults I sometimes use the "cachet de pain." My rule is to begin the administration of the remedy as soon as the disease is recognized, and to continue it in increasing doses until its effect upon the disease is manifest, then gradually to diminish the dose and increase the intervals between the doses.

In addition to the use of the sulpho-carbolate, I always use tonics and stimulants freely, and nourishment, in a concentrated form, such as beef extract, cream, etc.

The local treatment is directed to the removal of the false membrane and the reduction of the local inflammation. This result is obtained, first, by hastening the natural progress of exfoliation; second, by the use of such remedies as will destroy the micrococci and dissolve the pseudo-membrane.—*Medical and Surgical Reporter.*

#### THE TELEPHONE.

In the wonderful progress of science the time has come when, by the aid of a telegraph wire stretched upon poles in the usual way, individuals may converse with each other in audible tones although separated by hundreds of miles of space. A man in Boston may sit at his desk in State Street, and converse with his partner or friend in Wall Street, New York, with as much ease and facility as if they were sitting side by side. This is indeed a stupendous achievement, and affords evidence that the hidden powers of nature are competent, when understood, to bring all the nations of the earth into instantaneous verbal communication with each other.

The telephone is the invention of Prof. A. Graham Bell of this city, and has resulted from a course of inductive reasoning, growing out of a careful study of the philosophy of sound, as related to wave motions in air, and in metals

when induced by electrical excitation. The instrument is exceedingly simple and inexpensive, and easily understood. It consists in attaching to the terminals of the ordinary telegraph wires between any two points powerful compound magnets, with coils of wire connected. In front of the poles, surrounded by these coils of wire, is placed a diaphragm of iron. A mouth-piece to converge the sound upon this diaphragm substantially completes the arrangement. When the human voice causes the diaphragm to vibrate, closing and breaking the circuit with each vibration, electrical undulations are induced in the coils precisely analogous to the undulations of the air produced by that voice. These coils are connected with the line wire, which may be of any length, provided the insulation be good. The undulations induced in these coils travel through the line wire, and passing through the coils of an instrument of precisely similar construction at the distant station, are again resolved into air undulations by the diaphragm of this instrument.

In order to attach this device to any lines of telegraph, it is only necessary to remove connection with the batteries, close the circuit, and the work is done. The wire serves the purpose of a speaking-tube, and when cities and towns are connected the results are the same as if the most perfect tubes were in use for the purposes of communication. How far this result can be made to reach is as yet undetermined, but experiments show that the communication is perfect through wires two hundred miles in extent. There is no reason to doubt that if the sounds are clearly transmitted between this city and Portland, and Conway, N. H., as they have been, a thousand or more miles will offer no obstacles. It is indeed probable that Europe will soon be within speaking distance of us, and that the Londoner may be able to inform his New York friends by word of mouth what he has upon his breakfast table as he sits down to the meal.

The most interesting experiments with the telephone were made on Monday evening, February 12th, between this city and Salem, distant eighteen miles. The wires were brought into the hall of the Essex Institute at Salem, and a large audience were present to witness the proceedings. Professor Bell briefly explained the construction of the instrument, and then sketched his studies of the system of transmitting sounds. An intermittent current was first sent from Boston by Mr. T. A. Watson, Professor Bell's associate. This caused a noise from the telephone very similar to that of a horn. The Morse telegraph alphabet was then sent by musical sounds, and could be heard throughout the hall. A telephonic organ was then put into operation in Boston. "Should Auld Acquaintance be Forgot" and "Yankee Doodle" were readily heard through the hall and heartily recognized. At this point Professor Bell asked

Mr. Watson for a song, and "Auld Lang Syne" came from the mouth-piece of the instrument almost before his words were ended. Mr. Watson was then asked to make a speech to the audience. He expressed himself as having more confidence eighteen miles away than if he were present. His speech was as follows: "Ladies and gentlemen, it gives me great pleasure to be able to address you this evening, although I am in Boston and you in Salem." This could be heard thirty-five feet distant, that is all over the hall, and brought down the house with applause. A system of questioning was then carried on, and Mr. Watson was asked if he heard the applause. The answer was, "I was not listening. Try again. The applause was given, and its receipt at once acknowledged in Boston. Coughing and singing were then heard, and a variety of questions were asked from the Salem end, among them, "What news from the electoral commission?" followed by the distinct answer of "I don't know of any."

The results of the experiment were "telephoned" to the *Boston Globe*, and the despatches constitute the first ever sent to the public press by the new method. Another experiment is soon to be tried in which a band of music will be stationed in Boston, and it is designed to show that the tones of the instruments can be enjoyed by an audience eighteen miles away. It is therefore possible that a choice concert in any great city may be heard and enjoyed simultaneously all over the country. These considerations must awaken profound wonder and interest in the mind of every one. We shall keep our readers informed respecting the telephone. —*Boston Journal of Chemistry*.

#### FRENCH PRESCRIPTIONS FOR ACNE.

*La France Médicale* states that M. Dudet, of Lyons, prescribes the following treatment in acne. Friction is to be made every evening over the acne papules with the following:

R Adipis..... 3 v.  
Sulphuris,  
Acid tannici ..... aa gr. viij. ad xv. M.

In the morning the face is to be bathed with warm water, to which a little bay rum has been added, the proportion being increased from day to day until it amounts to one-third. M. Doyen, of Lyons, recommends bathing with the following:

R Hydrarg. bichloridi ..... gr. xxx.  
Tinet. lavandulæ..... f. 3 ijss.  
Aquæ distillatæ..... f. 3 x. M.

M. Hardy uses this formula:

R Potassii sulphureti,  
Tinet. benzoini ..... aa 3 ijss.  
Aquæ ..... f. 3 x. M.

Two teaspoonfuls in a glass of warm water to be used externally.

#### SALICYLIC ACID IN ACUTE RHEUMATISM.

At the December meeting of the Medical Society of the Royal College of Physicians in Ireland, Dr. J. W. Moore communicated the results of his experience of this remedy in the treatment of acute rheumatism in the Meath Hospital and County Dublin Infirmary. Detailed observations of six cases were given, and brief notes of ten cases treated by other methods were appended for the sake of comparison. The ten patients spent an average period of 26.6 days under treatment in hospital. The average duration of the stay in the wards of those who were given salicylic acid was 14.8, and this, too, although most of the patients treated by it were purposely kept under observation for many days after the symptoms had disappeared. The mean duration of the sojourn in hospital is now only about *one-half* what it used to be. Again, an examination of the clinical charts in the cases shows that under the ordinary methods of treatment the average number of "days of pyrexia," or days on which the axillary temperature reached or exceeded 99° Fahr., was 19.3. Under salicylic acid, on the contrary, it was 5.5 days. So that the symptom of feverishness was but *one-fourth* as persistent in the second series of cases as it had been in the first. If it were fair to base any definite opinion on so few observations, the author would give the following conclusions as to the value of the new treatment:

1. Salicylic acid appears to be a valuable and almost specific remedy in the treatment of acute rheumatism.
2. After the administration of a few moderate doses of five grains each, given at hourly intervals, a marked amelioration of the symptoms usually occurs. Thus, the temperature and pulse begin to fall, the swelling and pain of the affected joints subside, and the patient sleeps.
3. The above doses—i. e., of five grains each—are quite sufficient to produce an impression on the disease, while the patients make but little complaint either of the frequency of the dose or of the taste of the medicine.
4. When pushed far, it sometimes causes singing in the ears and diaphoresis. Under these circumstances its administration should be temporarily suspended.
5. To prevent relapse, it should be given for some days, but at gradually lengthening intervals.
6. Finally, as to its probable action as a preventive of the dangerous cardiac lesions of acute rheumatism, the author could only endorse the words of Dr. Coates, of Belfast, in a recent paper: "I think it can hardly be denied that medicines which cut short the disease, as I believe there can be no doubt salicylic acid does, must render the liability to these complications less."—*Med. Times and Gaz.*, Dec. 30, 1876.

#### SUBCUTANEOUS INJECTION OF MORPHIA IN THE TREATMENT OF SCIATICA, LUMBAGO, AND BRACHIALGIA.

Dr. Henry Lawson, Assistant Physician to St. Mary's Hospital, London, since the publication of

his work on this subject, has accumulated additional experience which he now lays before the profession (*Med. Times and Gaz.*, Dec. 16, 1876). He says: "I have had more than seven years' experience of the results of the subcutaneous injection of morphia, and I have seen more than eighty cases of these forms of nerve affection—some of them excessively bad cases—and in not more than three did this treatment prove a failure. That is to say, that subcutaneous injection of morphia invariably gave relief—in most instances complete relief—and that by means of this relief the patient was enabled to eat or drink with comfort, and by help of perchloride of iron, and in some cases by cod-liver oil, he was thus enabled to put on flesh rapidly, and to repair the waste of tissue under which he had been laboring. And here I would mention that a remedy which is most valuable as a restorative in these cases is the hypophosphite of soda. Indeed, I think it as good a mode of administering phosphorus as any other. But in hospital cases it is questionable whether it can be beneficially employed, for we all know that the present system of administering drugs in many of our hospitals is most objectionable and faulty. It must be confessed that we owe our knowledge of this drug and its valuable effects in great measure to the recommendation of Dr. C. B. Radcliffe, to whom indeed, I think, we may give all the credit of introducing the phosphorus into the medical treatment adopted by this country.

It is as a means of relieving the pain that I administer the morphia—not, as some have erroneously imagined, as a means alone of curing the disease; and while the patient is painless there must be, as I have already laid down, every attention paid to his feeding, his walking, his warmth, and his *ease of mind*; to this last above all, for, be assured, a patient whose mind is kept constantly in a condition of worry cannot be improved in bodily condition by any mode of treatment whatever.

Of course the salt I employ is that of the muriate of morphia dissolved in pure distilled water alone. Take five grains of this salt, and add to them a single drachm of water, then heat the mixture over a spirit lamp, and a perfect solution will form. This will, on cooling, in winter assume a rigidly solid condition, and in summer, save in very hot weather, will be unfitted for injection if cold. And here it is necessary to say that most muriate of morphia, as got from local chemists, is worthless. I have tried at many houses, where I have obtained other drugs in comparatively pure state, to obtain pure muriate of morphia, but in vain. It, when so obtained, was found to dissolve with excessive difficulty, to form a muddy instead of a perfectly clear liquid, and to leave a certain amount undissolved. Hence I have for years obtained the morphia I use from Messrs. Hopkins and Williams, of Cross-street, Hatton-garden, of whom, it is perhaps needless to say, I never obtained any but the very purest salt, which was readily and completely soluble in warm water.

With regard to injection, I may say that a further experience has borne out my remarks of four years

ago—viz., that it is of importance to make the injection as close to the seat of pain as possible. It would, of course, be utterly out of my power to attempt any explanation of this. Indeed, as far as physiology is concerned, the facts would appear to be against this view. But I simply say that my experience—and it is derived from many trials on my patients—points to this, that to allay pain most successfully by subcutaneous injection of morphia, we must, as a rule, inject as close to the seat of pain as possible. As a fact that likewise is opposed by some physiological reasoners, we may mention that the best treatment of acute bronchitis is the production of an irritation of the surface of the chest. This is well known by the medical man, but it cannot be explained by certain physiologists, who therefore suggest that counter-irritation in any other direction would be equally efficacious. But we know that it is not.

And as to needles. I have had considerable experience, having made many thousand punctures with their aid; and I have come to the conclusion that, as the instrument is made nowadays, in most cases it is utterly and entirely wrong. I will not say that the instrument-makers are to blame for this, but assuredly whoever first ordered the gigantic instruments considerably over two inches in length that are generally appended to a subcutaneous syringe case, made a grievous mistake, and, furthermore, committed an error which, in its results, falls on both the patient and the practitioner. On the former it tells by the production of occasional abscesses, which we know are produced sometimes if a needle is introduced to a depth of two inches into the skin; and also by the fact that the drug is not so rapidly absorbed, for any one with the smallest knowledge of microscopic anatomy is aware that the portion of the integument immediately beneath the "zone of indifferent tissue" is loaded with minute bloodvessels, while further in you have merely loose connective tissue, with, of course, larger vessels, but not anything like numerous vascular parts you have got above. Then, secondly, it tells against the physician, for, if he has many injections to perform, we may put down as a moderate allowance for breakage at least one needle in three weeks. And these two or three errors may be easily avoided by using a needle of not more than half an inch in length. My own needle barely measures three-eighths of an inch long, yet the last needle that I obtained I have used in at least seven hundred instances, and it yet shows no symptom of yielding; it is as firm as when it left the maker's hands. And here I must offer a piece of advice to the beginner. In the first place, you should always use silver wire for plugging your needles with when they are put in the case, and invariably employ plain steel needles—firstly, because they are less easily broken than gold; secondly, because they are finer in make; thirdly, because they retain their points exceedingly well, which gold does not; and fourthly, and most important, because they are driven in with one-fourth of the pressure that is required for a gold needle.

And here I may mention that the judicious practitioner will invariably cleanse his syringe before laying it aside. This is essential in the case of morphia injections, for if it be not done the instrument will be unfit for use on the next occasion. It is easily done: Just draw up enough pure water to fill the instrument, then force half of it through the nozzle, and next partly unscrewing the needle, and closing the point with the finger and thumb of the right hand, inject the remainder of the pure water through the screw part that unites needle and cylinder. Then place the wire in the needle and your instrument is ready for its case, and will be immediately fit for use when required again. These directions may seem trivial, but those who follow them will not be of that opinion.

With regard to the quantity of morphia solution that may be injected, I have had since the publication of my treatise on Sciatica some peculiar experience. I mean that I have met with some cases in which such a small dose produced such excessive vomiting that at first I thought I should have had to give up this method. And, indeed, I should have desisted giving the injection had not the patients invariably declared that, notwithstanding the illness it occasioned, they would still persist in having the injection, because, as they alleged, it so greatly diminished the pain even forty-eight hours after it was done, while for some hours it absolutely prevented it. In three of these cases the largest dose that could be given subcutaneously without the infliction of vomiting was the one-twenty-fourth of a grain, so that in each of them I was compelled to make a specially diluted solution, as it would have been difficult to estimate that proportion in case my own solution were employed.

#### COLLECTION OF PRESCRIPTIONS FOR DISEASES OF THE NERVOUS SYSTEM.

BY C. C. VANDERBECK, M.D.

Having for years carefully preserved the copy of the prescriptions ordered for patients at the various clinics of our numerous hospitals and dispensaries, at which I may have been attending, I now submit some of them to the readers of the *Medical and Surgical Reporter* :—

##### SCIATICA (*Non-rheumatic*).

R. Quinæ sulph., grs. xij.

Sig.—Two grains every four hours, in solution.

R. Tinct. iodinii.

Sig.—Paint the painful part with this once a day.

R. Morph. sulph. gr.  $\frac{1}{6}$ .

Sig.—Give hypodermically, once a day.

*Da Costa.*

##### DOUBLE NEURALGIC SCIATICA.

Full, nutritious diet. Life in the open air.

Such use of hypodermic injections of morphia as shall insure ease from pain; also:—

R. Pil. ferri. arsenic. et quiniæ.

Sig.—One pill after each meal. *Da Costa.*

##### EPILEPTICAL SEIZURES AT THE MENSTRUAL PERIOD.

The case in question was a young woman who menstruated only once in six weeks, and then the flow was very scanty. The convulsions were pronounced to be due to reflex irritation, from congestion of the ovaries.

R. Aloes, gr. j.  
Belladonna ext., gr.  $\frac{1}{6}$   
Capsici, gr.  $\frac{1}{4}$ .  
Ft. pil.

Sig.—Taken every evening for a few days before menstrual period. Just at this time, leeches applied over the ovaries, and warm baths, will be of service. The diet must be of easy digestibility.

Also use the following prescription:—

R. Pot. brom., grs. xx  
Tinct. belladon., ℥ij  
Syrupi,  
Aquæ, aa q.s., ad. ft. 3 ij.

Sig.—One dose three times a day.

It may be remembered that it was in just such cases as these, of convulsions attending disorders of menstruation that bromide of potash first came into use. It was soon discovered that its antispasmodic virtue extended to all forms of epileptic seizures, whether connected with some obvious irritation, or having no such dependence, being idiopathic in character.

##### IDIOPATHIC EPILPSY.

R. Sod. Brom. grs. x  
Tinct. aurantii cort. ℥ xx  
Tinct. belladonnæ, ℥ ij  
Mist. acaciæ, q.s., ad. ft. 3 j. M.

Sig.—One dose, taken in water, two hours after each meal.

Or —

R. Potas. bromid., ℥on ij  
Ammon. bromid., ℥on ij  
Pot. bicarb., grs. xx  
Tinct. columbæ, ij  
Aquæ, ℥on xij. M.

Sig.—Teaspoonful to tablespoonful, ter die.

The addition of the columbo makes the mixture more agreeable to the stomach, and also acts as a mild tonic, and it also preserves the liquid from becoming flocculent, as it tends to do when the menstruum is composed of water solely.

##### NEURALGIA.

R. Veratriæ, grs. x-xx  
Adipis, 3 j. M.

Ft. unguentum.

Sig.—Apply to part.

Also—

℞. Aconitæ, gr. ss  
Veratriæ, grs. x  
Adipis ʒ j. M.

Sig.—Apply to part.

## NEURALGIC HEADACHE.

℞. Quiniæ sulph., grs. xij.  
Morph. sulph. gr. j. M.

Triturate in a mortar, and divide into twelve powders.

Sig.—One powder every four or five hours.

## UNCOMPLICATED SUPRA-ORBITAL NEURALGIA.

℞. Arsenici, gr.  $\frac{1}{4}$   
Ext. conii, gr. j  
Ext. cannabis ind., gr.  $\frac{1}{8}$ .  
Sig.—One dose, ter die. *Da Costa.*

## OBSTINATE NEURALGIA.

℞. Sodæ arseniatis, gr.  $\frac{1}{4}$   
Cinch. sulph., grs. ij  
Conii ext., gr. j.

Sig.—One dose, ter die. During the paroxysm use hypodermic injection of morphia.

## CEREBRAL NEURALGIA.

℞. Chloral hyd., grs. x  
Pot. bromid., grs. xx  
Syr. aurant. cort., ʒ ss  
Aquæ, ʒ iss M.

Sig.—One dose at bed time.

Also—

℞. Tinc. cinch. comp., ʒ ij  
Fl. ext. cinch., ʒ j  
Ammon. brom., ʒ ss. M.

Sig.—One teaspoonful, ter die.

## OVARIAN NEURALGIA.

℞. Ammon. mur. ʒ ij  
Tinct. aconit., ʒ ij  
Syr. aurant. cort., ʒ viij. M.  
Sig.—One drachm, ter die. *Da Costa.*

## ANTI-NEURALGIC TONIC.

For long standing cases—

℞. Acid. phosphoric dil., gtts. xx  
Tinct. cinch. co., ʒ j  
Strychniæ phos., gr.  $\frac{1}{32}$  M.

Sig.—One dose, ter die.

VERTIGO (*Gastric*).

℞. Argenti oxidi, gr.  $\frac{1}{4}$   
Capsici pulv., gr.  $\frac{1}{4}$   
Ext. colocynth. co., gr. j  
Camphor. pulv., gr.  $\frac{1}{2}$ . M.

Ft. pil. No. 1.

Sig.—Take after each meal

## IDIOPATHIC VERTIGO.

℞. Sodii bromid., gr. xv  
Ext. belladonnæ, gr.  $\frac{1}{4}$   
Vin. colch. rad., gtt. x  
Muc. acaciæ, q. s. ft. ʒ j. M.

Sig.—One dose, ter die.

If bowels are costive, take one comp. rhubarb pill each night.

## CHRONIC HICCUGH, FROM NO ASSIGNABLE CAUSE.

℞. Tinct. calabar bean, ℥ x  
Pot. carb., gr. x  
Mist. acaciæ, ʒ j. M.

Sig.—One dose, ter die.

No vegetables should enter into the diet. The food should be non-stimulant, making use of milk, eggs, etc. In some cases, tinct. of calabar bean alone answers very well. Sometimes a hypodermic injection of morphia cures or relieves.

## INCIPIENT SOFTENING OF THE BRAIN,

Attended with bad memory, visions, giddiness and headaches.

℞. Acid. phos. dil., gtt. xx  
Tinct. cinch. co., ʒ j  
Tinct. nucis vomicæ, gtt. v. M.

Sig.—One dose, ter die.

Keep the patient in society; or send him upon a journey. Aim at bringing before his mind new scenes, etc.

## SOOTHING NERVINE AND TONIC.

℞. Pot. bromid., ʒ ss  
Ferri pyrophos., ʒ ij  
Elix. humuli, aa. ʒ iv. M.  
Sig.—Tablespoonful ter die. *McArthur.*

## ANODYNE PILLS.

These have the advantage of not affecting the bowels:—

℞. Morph. acet., grs. ij  
Hyoscyam. ext., grs. viij. M.  
Ft. pil. No. xvj.

Sig.—One pill at bedtime.

## LARYNGYSMUS STRIDULUS.

Large doses of bromides. For a child two years old, six grains, every two hours, may be given. If there is any source of irritation, as from the stomach or gums, this must be removed. If not complicated with laryngitis, indicated by a hoarse voice, cold sponging is the grand remedy. To arrest a paroxysm, a dash of cold water in the face is often sufficient. If this fail, cold water applied to the whole body is of value. The child should be sponged faithfully and regularly, at least three times a day, and also allow the child to be much in the open air.



**NERVOUS EXHAUSTION** (*From Excess*).

General weakness, and tremors in the legs, being the symptoms.

R. Syr. calc. hypophosphitis, 3 ij  
Ferri phosphitis, grs. ij. M.

Sig.—One dose, ter die.

Also—

R. Ol. morrhue, 3 j  
Ter die.

Eat rare meat, milk, eggs; not very many vegetables, especially if digestion is poor.

*Da Costa.*

**LESSENERED REFLEX EXCITABILITY.**

Small doses of quinine, frequently repeated, will increase reflex excitability.

**ARSENIC AND IRON TONIC.**

R. Liq. pot. arsenit, 3 ss  
Vin. ferri, 3 ij  
Syr aurant cort.,  
Aque aa 3 et 3 ij. M.

Sig.—One teaspoonful, ter die, after each meal, on a full stomach.

**PUERPERAL CONVULSIONS.**

R. Pot. bromid., 5 j  
Chloral hyd., 3 j  
Camphoræ, grs. vj  
Tinct. card. co., 3 vj. M.

Sig.—Dessert spoonful, every half hour, until relieved.

**GASTRODYNIA.**

R. Ol. cajuputi (on sugar), gtts. iv.

A mouthful of hot water will often quell the pain.—*Philadelphia Medical and Surgical Reporter.*

**CURATIVE EFFECTS OF MILD CONTINUED COUNTER-IRRITATION OF THE BACK IN CASES OF GENERAL NERVOUS DEBILITY AND SPINAL IRRITATION.**

Dr. Arthur Gamgee recommends the compound mustard liniment (Br. Ph.) as the best available counter-irritant in these cases, as it produces a remarkably active irritation of the sensory nerves of the skin, which subsides to a great extent when the preparation is removed, but which can be renewed almost indefinitely without leading to any eczematous, pustular, or ulcerative condition. He finds this plan of treatment more successful than the use of iron, cod-liver oil, phosphorus, or the constant galvanic current. The theory of its action which he gives is that counter-irritation exerts a tonic action on the local vasomotor nerve centres.

In consequence of the expensive character of the essential oil of mustard, and the ethereal extract of mezerion which enter into the composition of this liniment, it is very commonly adulterated and is nearly inactive. When properly prepared, the lin-

iment should possess a very pungent odor, and should produce an almost painfully acute sensation in the nostrils when it is smelled. If properly prepared a few drops of linimentum sinapis sprinkled over a pad of cotton-wool ten or twelve inches long and four or five inches broad, will suffice to produce, in a few minutes, pretty intense redness of the skin of the back, accompanied by more or less of the painful or burning sensation characteristic of mustard.

The general result of the use of this mode of counter-irritation is thus described: "On the first or second day of the treatment, the patient, if a delicate hysterical girl, may complain that the pain caused by the mustard is almost unbearable, and she may declare that the application cannot be continued. By diminishing the amount of mustard oil used, however, all such urgent objections on the part of the patient are removed. As soon as the application has been so controlled as to bring on merely an active glow and not unpleasant tingling of the skin, the patient declares that the increase in her strength is marvellous; the pain in the back and limbs undergoes a diminution, or, as long as the mustard counter-irritation is kept up, are completely in abeyance, the irritability of temper diminishes, and simultaneously the general health undergoes a marked improvement.

"The increased feeling of vigor produced by the treatment is not illusory; as a rule, I have found that the improvement thus commenced has kept up so that a hysterical girl who has been for some weeks confined during the day to a couch to which she could with difficulty make her way from her bedroom, has in a few days cheerfully taken walks of considerable length."—*The Practitioner.*

**PHOSPHATE OF LIME IN THE TREATMENT OF FRACTURES AND WOUNDS.**

Clinical observation has already confirmed the value of this drug, but a special phenomenon, which in a certain number of cases gives evidence of the activity of the reparative process going on in the injured bones, has apparently, as yet, escaped observation. Several patients in the wards of M. Dolbeau, in Beaujon, to whom this drug was administered in doses of thirty grains three times a day, complained of a sensation of tingling in the affected limb which ceased when the drug was withheld and reappeared when its use was resumed. The following cases exemplify this fact:

1. Alexandrine S— entered the hospital on July 13, 1867, with a comminuted fracture of the left humerus, complicated with a small external wound. Several methods of treatment were tried, but on the 8th of May, 1868, the fracture was still ununited. A spoonful of the syrup of the lacto-phosphate of lime, representing fifteen grains of the salt, was then given three times a day with the meals; at the end of eight days the dose was doubled. During the first week the patient's appetite became excessive, and it continued so for three weeks, after

which it returned to its normal condition. After the fifth day of the treatment the patient felt stronger, and she complained of a sensation of tingling, and of continuous pricking in the legs and arms, especially at the seat of fracture. The phosphate of lime was continued in the same large doses, and caused no disturbances of the general health. The formication gradually decreased in severity after the first week. The limb was placed in a silica splint, and when this was removed, on July 8th, the consolidation was almost complete.

2. Charles D.—received a compound fracture of both bones of the right leg on May 1st. On June 1st the wound had healed, but the callus was still soft. On June 3d he was ordered two spoonfuls of the syrup of the lacto-phosphate of lime three times a day. After twenty-four hours his appetite began to increase, and it became excessive about the eighth day. At the same time he complained of a marked sensation in the affected leg, which he compared to that produced by electricity and by numerous prickings. On June 20th the callus was resistant, although mobility still existed.

3. X—, fracture of humerus on June 12th. Consolidation well advanced on July 9th. On the 17th a spoonful of the syrup was ordered three times a day; these doses were doubled on the 19th. On the 22nd the appetite was excessive, and the patient felt in the fractured limb some formication, which gradually became more marked. The drug was withheld for four days, and on the fourth day all the phenomena had disappeared. It was then resumed in the same doses, and after three days the patient complained anew of formication.—*La Tribune Médicale*, December 3, 1876.

#### THE TREATMENT OF ERYSIPELAS BY THE MURIATED TINCTURE OF IRON.

By Dr. CHARLES BELL, Edinburgh.

The primary views I have hitherto advocated as to the nature and sources of erysipelas may be briefly stated thus:—In whatever form erysipelas may appear, it is the effect of blood poisoning from improper diet, and exposure to impure air; and, although in some instances it is apparently the consequence of infection, it may in reality be produced by those affected being exposed to the same vitiated source, and also by there being a peculiar idiosyncrasy in certain families which induces several members to be affected at the same time, yet not residing constantly in the same locality. There is also reason to suspect that, after exposure to the exciting cause, the disease may lie dormant in the system until stimulated into action by some irritation or excitement, or even by some depressing circumstance. In several of these respects it resembles diphtheria and scarlatina as well as puerperal fever; but more especially

in the fact that all these diseases yield to the same mode of treatment.

It may not be uninteresting to refer to some circumstances which seem to illustrate and confirm these views. That erysipelas is the result of exposure to a vitiated atmosphere is, I think, rendered obvious by the following cases reported by the late Dr. Begbie, senior, who relates that a locality in the New Town of Edinburgh became vitiated by the effluvia arising from putrid animal and vegetable matter in the shops on the ground floor and sunk flat, and that in one of the houses above, entering from a cross-street, all the inmates became sickly, and the man-servant was seized with a severe form of erysipelas. He was treated according to the practice then in vogue, and his "convalescence" was slow and unsatisfactory, so that four or five weeks elapsed before the patient was able to resume his duties."

The family removed to another house, where the air was pure, and they soon all recovered their health, with the exception of the nurse, who became affected in a few days after the removal with erysipelas of a most inveterate character, thus showing that the disease must have been dormant in the system.

The wife of one of the shopmen in the vitiated locality referred to, "who was in the daily habit of attending her husband's place of business, and assisting him in conducting it, was, during the progress of the first of these cases of erysipelas, carried home in the pains of childbirth, and died on the fourth day after delivery, with obscure indications of puerperal peritonitis, and rapid sinking." In this case we have an example of the same vitiated atmosphere, giving rise to two apparently different diseases, erysipelas and puerperal fever.

The following cases give a striking example of the idiosyncrasy which exists in some families to have several members affected at the same time. The village of the Water of Leith, celebrated for its unhealthiness from its visits of cholera, fever, and other epidemics, and where the Board of Education have chosen to erect one of their largest educational establishments, was visited by erysipelas. Two sisters, living under the same roof, apparently caught the disease from different sources, having resided apart from each other for some time, the one occupying their present dwelling, the other residing with a gentleman in a distant part of the town. At the opposite side of the same lane a man became affected, although he had no communication with the sisters; and, in succession, other three cases occurred in the same household. Thus showing that different people exposed to the same polluted atmosphere, although not having intercourse with each other, are liable to become affected with the same disease.

Dr. Begbie relates another case which still further illustrates the view under consideration:

"Mr. B., of full habit, became affected with erysipelas, and after a tedious illness made a good recovery under the treatment of the tincture of the muriate of iron. His brother, residing in a distant part of the country, with whom he had maintained no intercourse for many years, was attacked with the disease at the same time."

The following cases go to prove that similar results may occur in regard to diphtheria and scarlatina: Some years ago I was requested to attend a family occupying a large and apparently well-aired house in England. I found the youngest child, a delicate girl, was suffering from diphtheria. The head-nurse soon became affected, then the under-nurse, and in a short time eight of the family were laid up with the disease; but they all made a good recovery under the treatment of tincture of the muriate of iron. On inquiry, I ascertained that the drains were in good order, but the back-windows overlooked a large grass field, which had been recently "top-dressed," and the smell coming from it was most offensive. The disease appeared partially in the neighbourhood, and scarlatina became very general.

I was called a short time ago to see a family occupying a baronial residence in Argyllshire, situated on the banks of a loch, into which the sewage flowed. Seven of the family were first attacked with scarlatina, and, on recovery from it, two were seized with diphtheria of a severe character—the one case was followed by paralysis, the other by abscesses implicating the glands of the neck. The lady of the house escaped the fever, but she became affected with diphtheria and was very nervous; the disease was checked, however, by the tincture of the muriate of iron. The whole family made a good recovery. On examination, I found that the modern part of the mansion communicated with the older portion by means of a long passage, from which, especially at night, there came an offensive smell.

I am persuaded that erysipelas is most frequently the result of exposure to impure air—and in this respect it resembles the other diseases I have referred to, in all of which there is obvious blood-poisoning. If this be so, it is clear that the treatment should consist of the means which is calculated to remove the poison most rapidly from the system, and counteract its effects without reducing the powers of life. With this view, after many years' experience, and considerable opportunities of judging, I confidently recommend the treatment with the muriated tincture of iron. I should not have thought it necessary to have repeated this opinion, having expressed it strongly in a previous paper, had I not observed in Professor Spence's recently published lectures, that he advocates the antiphlogistic treatment practised thirty years ago; at the same time, he not only under-

goes in some cases. In example of this he says, "When the disease assumes an acute character, and is accompanied with a quick, full pulse, or in erysipelas of the head, when there is a tendency to violent delirium iron should not be given." But the truth is, that, had he watched its effects, and understood its influence on the constitution, he would have discovered that the cases referred to are those in which the treatment by the tincture of muriate of iron is the most immediately beneficial. In proof of this I cannot do better than quote the case of the nurse referred to in the former extract from Dr. Begbie's work. He informs us that she was a fine healthy woman approaching the age of fifty. "She was seized with symptoms of acute illness, commencing with violent headache, flushed face, severe pain in the lumbar region, great febrile excitement, and high delirium. With these symptoms the erysipelatous rash appeared on the right ear, and quickly spread over the same side of the face in the course of the night. The aspect of the case at this early stage indicated a severe and lengthened illness; indeed, I do not remember to have seen for a long time one which, from the constitutional disturbance and local symptoms, threatened a more unfavourable issue." "Seeing that the case was of a severe character, I hesitated placing reliance on iron alone, and directed the abstraction of twelve ounces of blood from the nape of the neck by cupping, and the administration of a full dose of castor-oil. These means being premised, and having observed that the urine passed in the course of the day—the second of the illness—was of a red colour, and scanty in quantity, that it was loaded with biliary matter, and presented, under the microscope, numerous blood-corpuscles, and many crystals of the triple phosphates, I ordered the muriated tincture in manner recommended by Mr. Bell, in doses of twenty drops every two hours, continued through the night and day. At the end of twenty-four hours there was a marked remission in all the more prominent symptoms; the erysipelas was arrested; the headache subdued; the delirium overcome; the pulse reduced in frequency and force; the skin covered with a gentle moisture, and bereft of its burning heat; the pain in the back removed; and the urine rendered more copious, and freed from most of the blood and bile of the previous day. The remedy was continued for twenty-four hours longer; and without experiencing any unpleasant effects, the patient was convalescent at the end of the fourth day, presenting a striking contrast to the case of her fellow-servant, who, with symptoms of a less severe character, suffered from illness during many weeks." Dr. George W. Balfour, who is not a likely person to take an erroneous impression on any subject, says, "I have treated all my cases, upwards of twenty years, with iron, and have had no cause to regret my doing

so. On the contrary, erysipelas is one of the few diseases for which I now believe we have a certain and unfailing remedy, and this whether it is infantile or adult, idiopathic or traumatic."

The remedy must be given in full quantity and frequency which I have recommended in order to produce its beneficial effect in the severer forms of the disease; and if any one expects to accomplish this desirable object by the use of the tincture of the perchloride of iron, either in erysipelas or any of the other diseases referred to in this paper, they will be disappointed, as such is the result of my experience both in erysipelas and diphtheria. Two illustrations may here suffice. I hold that a material difference exists between the effects of the two so-called similar preparations of iron—viz., the muriate and perchloride—both of which I have fully tested, and could give many instances of their marked therapeutic difference. In regard to erysipelas, I was attending a lady who was severely affected by it after a tedious attack of rheumatic fever. I ordered her to have thirty drops of the tincture of the muriate of iron every two hours; but to my great disappointment I found that she went on day after day without any improvement. I then asked to see the medicine she was taking, when I discovered it was the tincture of the perchloride, sent by mistake by the chemist. I immediately changed the medicine for the tincture of the muriate of iron and in a few days the disease disappeared.

I was requested a short time ago to attend a young lady suffering under a severe attack of diphtheria. She had been taking for some time the tincture of the perchloride of iron, with little apparent benefit, as her pulse was 110, and her throat covered with diphtheritic membrane. She was put on the tincture of the muriate of iron, and had her throat swabbed with a solution of Condry's fluid several times a day. The membranous deposit rapidly disappeared, and the pulse in two days fell to 80, and in the course of a week she was quite convalescent.

In conclusion, I have again to state, in regard to the treatment of erysipelas with the tincture of muriate of iron, that I have the most perfect reliance on it; and that when it has failed, the fault has been not in the remedy, but in the mode of administering it. I hold that no one is justified in condemning it until they have given it as recommended, and found it fail in effecting a cure in uncomplicated cases. Of course, I admit there are cases complicated with other virulent diseases, in which no human aid can be of any avail; or it may not have been had recourse to until after the system has fairly succumbed to the disease. Such cases must form an exception. In short, if any remedy is entitled to be called a specific, it is so; at all events, as much so as quinine is in ague.—*Edinburgh Medical Journal*, August, 1876, p. 98.

## ON THE OPEN AIR TREATMENT OF CONSUMPTION

By DR. JAMES BLAKE, San Francisco, California.

An article in the *British Medical Journal* for October 24th, 1874, recalls an intention I have had for some time of sending a communication on the open air treatment of consumption, a plan I have advocated for many years, both on the grounds to which Dr. Marcet alludes as to its being a septicæmia, and also on account of the advantages which such a treatment offers for improving the digestive organs. In a paper published in the *San Francisco Medical and Surgical Journal* in 1860, I pointed out the advantages to be derived to the digestive functions by living in the open air; but looking at the septicæmic element of the disease, no other treatment, it appears to me, can so effectually combat it as living in the open air, the only condition in which a patient with diseased lungs can avoid re-breathing the poisoned air he has expired, laden with the germs for intensifying the putrefactive processes going on in his lungs. There is undoubtedly a germ of truth in the theory of Dr. MacCormac of Belfast, that the chief cause of consumption is re-breathed air, but not, I think, from its being overcharged with carbon, as he supposes, but because it is loaded with a much more subtle poison in the putrefactive germs which it contains. Some twelve years ago, I published some cases in the *American Journal of Medical Science*, showing how many cases of consumption had been arrested, and some cured, by what I called the open air treatment of the disease; and a longer experience has convinced me that this method offers the best chance for our consumptive patients. But, before the profession can be induced to employ it, I am aware that an accumulated mass of prejudice has to be removed, not only amongst physicians, but more particularly amongst the public, as regards the evil of exposure and living in the open air. The idea of advising a patient in the third stage of consumption, suffering from cough and night-sweats, to sleep in the open air, is a proposition which in England, I am aware, would be considered not only as dangerous, but almost as a sign of lunacy. Even here, where it is no very uncommon thing for persons to sleep out of doors, and where the dewless nights of our mountain ranges during our rainless summers render any covering but blankets and a tree quite superfluous, I often met with objections to following such a course. And yet I am convinced that it is the best method that we possess for arresting and curing consumption. In England possibly, and in fact in most parts of Europe, the occasional summer rains and the absence of dry mountain ranges, with their pine-covered ridges, offer obstacles to such a treatment being fully carried out; but the principle once recognised, a great deal may be done even there towards employing it. In order, if possi-

ble, to remove to a certain extent this prejudice, I would state that I have never in a single instance seen any ill effects result from it. I have sent out patients to sleep in the open air who were so far reduced that they could not even ride on horseback, but had to be conveyed in a carriage. The difficulties and annoyances of living in the open air are, I believe, entirely in the imagination. The most agreeable holidays I have ever spent have been whilst camping out with a sensible party of ladies as well as gentlemen, and never have we broken up camp to return to houses without regret by all the members of the party. When ladies are in the party, it is better to have a tent, the front of which must always be fully open at night. During the winter months, the southern part of the State about San Diego or Santa Barbara is the most desirable place for patients, as there are seldom more than a dozen rainy days during the year; but in the summer the coast range of mountains north of San Francisco offers by far the most congenial climate, far better than that of the Sierras, owing to the greater equability of the temperature. From the middle of May to the end of October, as a general thing, living in the open air can be enjoyed without any fear of rain. As the summer heat increases the higher mountains up to 4,000 or 5,000 feet, ensure an agreeable climate, where the thermometer never rises above 85 deg. (this, in the dry air of the mountains, is about the same, as far as our sensations are concerned, as 70 deg. in England), and never descends below 55 deg., ranging generally from 60 deg. to 75 deg. during the twenty-four hours. As a general thing, at a height above 1,500 feet, the camp can be made in pine-woods, and I believe that there is something antiseptic in the exhalations of these trees; certain it is that they impart a most agreeable odour to the air, particularly in warm weather. As for the cost, the expense is slight, as there are no hotel bills to pay; the journey across the continent is now rendered so easy, an invalid can generally support it without inconvenience, and in fact improve during the trip. In the cold weather the trip can be made by the steamer to Colon, and thence to San Diego by the Pacific Mail Company's ships.—*British Med. Journal*, June 3, 1876, p. 687.

#### ON THE TREATMENT OF DIPHTHERIA.

By SIR JOHN ROSE CORMACK, Physician to the Hertford British Hospital of Paris.

The treatment of diphtheria requires to be considerably varied in its details, according to the nature of each case, the constitutional peculiarities of the patient, and the type of the epidemic. There are, however, certain general principles of treatment which must always be acted upon, and the infringement of which may lead to disastrous consequences.

Even a limited experience will teach an observant practitioner not to expect curative results in diphtheria from particular medicines or vaunted formularies of treatment, but to strive to support life by the measures best suited to each case, rationally using medicines as exigencies and opportunities arise, and not in a routine fashion. The first Begbie of Edinburgh, and, I may say, the best physicians who have given their views on this subject to the profession, express themselves to that effect. Begbie, whose skill as a therapist stood very high, concludes the summary of his able and instructive essay on "Diphtheria and its Sequels" in the following sentence:—"Lastly, as we have no specific remedy for diphtheria, the disease and its sequels must be treated on the general principles which regulate our practice in fever, in inflammation, and in nervous disorders of asthenic character."

The treatment of diphtheria may be conveniently discussed under the three heads of *general*, *local*, and that which pertains to the *paralytic affections of convalescence*.

The *general treatment* has to be considered in respect to *atmosphere*, *food*, and *medicines*.

The temperature of the room ought to vary as little as possible, a temperature of about 17° Cent. (63° F.) being maintained. The patient ought to be screened from currents of air, care being taken that free ventilation is not interfered with, and that the air is moistened by a regulated escape of steam from a suitably-contrived kettle. The arrangement adopted in the case of E. G. answered very well. Nothing can be better for the purpose required than Dr. Pretty's kettle, which is thus described by Sir William Jenner:—"This is a tin kettle with a small aperture at the top, closed by a screw instead of a common lid. From the front of the kettle project two spouts of about three feet in length. One spout springs from the upper part of the kettle, and passes forward in a straight line; the other spout springs from near the bottom of the kettle, and passes obliquely upwards. The lower spout ends in a spoon-like projection, just under the slightly curved-down open mouth of the upper spout. The steam passes out of the upper spout, and the condensed vapour drops into the little spoon, and is returned by the lower spout to the bottom of the kettle." A thermometer and a steaming-kettle are indispensable in the chamber of the diphtheritic patient. The maintenance of good ventilation, combined with a moist, warm, and equal temperature, is a paramount necessity when tracheotomy has been performed; and in all cases, and in all stages of the disease, in which there exists diphtheritic sore-throat, it is important, as a means of moderating the paroxysms of glotto-laryngeal spasm, that the patient inhale air which is soft, warm, and equable in temperature. Even in the rare cases in which the throat affection is absent,



it is the duty of the physician to take the measures best calculated to secure in the sick-room such an atmosphere as has been described; for in such cases the disease may at any moment manifest itself in the air-passages.

The support of life by stimulants and aliments—the feeding of the patient—is universally stated to be an essential element in the treatment of a case of diphtheria. Neither alimentation nor tracheotomy were *curative* agents in the case of E. G.; nor in any case of diphtheria can they be so regarded. Nevertheless, they were the principal means by which E. G. was saved from death; and by them, indeed, is recovery chiefly rendered possible in all such cases. Success in alimentation and success in tracheotomy are only means by which we gain time, by which we support life for a period, we hope, of sufficient duration to enable the disease to run its natural course, guided and aided by us whenever therapeutic opportunities arise.

It is necessary to insist emphatically on the fact, that, in the treatment of diphtheria, there is nothing approaching alimentation in importance. Unfortunately, however, this knowledge is too often of little importance to physicians and patients in bad cases, for in such there is almost no power of assimilation, and there is likewise extreme difficulty in inducing the patient to take food, or, having taken it, for him to retain it. Diphtheria-stricken patients generally loathe the food, and children often struggle violently against attempts to feed them. When food is swallowed it is often rejected immediately. The difficulties in the way of feeding are always great, and sometimes they are insuperable; but, they must be resolutely faced. The alimentation of diphtheritic patients requires great skill, tact, and, I might almost say, inventive power on the part of the medical attendant, assisted by the co-operation of a well-disciplined, conscientious and obedient nurse. Each case has dietetic difficulties which are its own, and must be met from hour to hour as they arise.

While, therefore, it would be tedious to go into details, a short statement of the practical principles which require to be carried out may be briefly stated. Pounded raw beef in very small quantities, moistened with the juice of under-done roast beef, is generally the best basis of alimentation. It will seldom be expedient to administer more of this preparation than one teaspoonful at a time, and not nearly so much if there be nausea. With the raw beef and other aliments, a little *pepsina porci* ought to be given from time to time. I have seen the difficulties of alimentation much diminished by the judicious addition of pepsine to the food. Together with the raw beef and other aliments, we must give stimulants liberally: the exact quantity must be determined by the exigencies of each case, and will be subject to frequent varia-

tions. As a general rule, however, it is well to remember that brandy is well borne in diphtheria by patient of all ages. Its effects require to be carefully observed in young subjects; but it may be accepted as a fact, that children bear brandy, sherry, and all spirituous stimulants exceedingly well. Proofs of the accuracy of this statement constantly present themselves in practice, both in respect to diphtheria and other diseases.

"When," says Sir William Jenner, "the disease begins with marked feebleness of pulse, dusky redness of throat, and extreme sense of general weakness, wine in full quantities is required at an early period. From six to eight ounces of sherry or port for an adult, and as good a diet as the patient can take, must be given from the first. In the course of the disease much larger quantities of wine, or a proportionate quantity of brandy, may have to be given. Of course, the quantity of stimulant must be regulated by the age and habits of the patient, as well as by the character and the stage of the disease; but remember that, as a rule, young children bear and take with advantage, in diseases of depression, much larger quantities of stimulants than you would probably suppose. A child of three years of age, now under treatment for diphtheria at the Children's Hospital, is taking, with apparent advantage, from one to two drachms of brandy every hour, i.e., from three to five ounces of brandy in twenty-four hours."

When we have nausea and vomiting to contend with, we must chiefly trust to brandy and pounded raw beef (duly pepsinated) as the dietetic articles most fitted for keeping up life. When the stomach will bear more bulky food, it is always useful to give a variety of suitable aliments, among which may be mentioned milk, egg-flip, and panada. As soon as it can be borne, cod-liver oil ought to be given. It has a wonderful power in preventing and restoring the waste of tissues.

There is very little if any scope for the administration of medicines when a bad case of diphtheria is at its worst. Till the fury of the disease has spent itself, it is wise to give as little medicine as possible, and never to give any at all unless the indication be clear and positive. When there is nausea and vomiting we may harmlessly and hopefully give oxalate of cerium or creasote, but we must avoid, on account of its depressing influence on the heart, the other great remedy for irritability of the stomach—hydrocyanic acid. As soon as the patient can digest it, iron in some form ought to be given in very small doses. It may be very usefully combined with a syrup of the phosphate of lime. Ferruginous medicines are urgently demanded from the very dawn of convalescence by the anæmic aspect of the patients, while cod-liver oil and phosphate of lime are equally called for



by their emaciated appearance. Building-up treatment, alimentary and medicinal, is most useful in preventing or moderating the paralytic affections incident to advanced convalescence.

There is no specific medicine for diphtheria—there is no way of *curing* that disease; but there are many medicines and many measures of signal benefit to diphtheria-stricken patients, by the skilful use of which they are often enabled to recover.

With the use of general means, it is sometimes proper in laryngo-tracheal manifestations of diphtheria to combine local treatment to dislodge or dissolve the false membrane. The treatment by emetics adopted for the former purpose is local in its intention, but general in its action on the patient.

Emetics in diphtheria are seldom of much use; but still there are many cases in which it is right to try to effect dislodgement of the false membrane. With that object, an emetic was administered to Miss P., on Sunday, 2nd January (p. 805); and for the same purpose emetics were given to E. G.

The emetics which ought to be selected are those which do not depress, and which act quickly. Perhaps sulphate of zinc is the most, and tartar emetic the least, suitable. The latter is not only unsuitable, but it is pretty certain to prove dangerous by its depressing action. Speaking of tartar emetic, as an emetic in diphtheria, Trousseau says:—"The selection of the particular emetic to be employed is not a matter of indifference. Tartar emetic, so lauded by some, seems to me to be the most dangerous of all emetics." . . . "It causes extreme prostration and accelerates death." Trousseau's teaching, unfortunately, is not universally followed in this matter, as I have had several occasions to observe. The following instance is confirmatory of Trousseau's statement. All the circumstances being remarkable, are accurately remembered by me.

On a summer morning in 1875, I accompanied my friend Dr. Borthwick, of Dumfries, on a visit to one of the great hospitals of Paris. During a long drive to the hospital, the chief subject of our conversation was the pathology and treatment of diphtheria in relation to emetics and tracheotomy in the laryngo-tracheal manifestation of the disease. We knew nothing of the cases we were to see. On our arrival we entered a medical ward where a physician was examining the first case of diphtheria, we were told, which had been received into the hospital during the current year. The sick man, aged about forty, was sitting half-dressed on his bed, a circumstance explained by his having just returned from the privy situated outside the ward. We ascertained that he had been about forty hours in the hospital, but did not learn the previous duration of his illness. Since admission, he had had low diet and no stimulants. He

spoke in a husky whisper. He had had no stridulous breathing. From his replies to questions, we ascertained that he chiefly complained of dyspnoea, diarrhoea, loathing of food and debility. The visible part of the interior of the throat was covered with false membrane; and the physician announced, after applying the stethoscope, that he heard semi-detached false membrane flapping in the trachea. The treatment prescribed consisted in a continuance of the antiphlogistic regimen, and the exhibition at short intervals of tartar emetic in doses of ten centigrammes. I do not know whether it was the prescriber's object to obtain the dynamic action of the drug, or whether its emetic effects were looked to as a means of dislodging the false membrane from the air passages. Before we left the ward, the patient went to and from the privy with tottering steps. The exertion induced extreme vital depression, unaccompanied by stridulous breathing or increase of dyspnoea. Dr. Borthwick and I agreed that the only chance—and that a very small chance—of recovery which this man possessed consisted in his being kept in the horizontal position, and liberally dosed with brandy, an emetic of sulphate of zinc being delayed till a rally should occur, and tracheotomy being resorted to only if it should be demanded by threatening asphyxia. We were equally agreed that under the combined depressing influences of diphtheria and antimony, it was not likely that the patient could survive more than a few hours. Our evil prognosis was correct, for the patient died in a state of collapse six hours after our visit.

The tartar-emetic treatment of diphtheria has been generally regarded as one of the wildest heresies in the practice of medicine, though some able men of large experience think and teach otherwise.

In 1859, during the prevalence of a severe epidemic of diphtheria at Paris, three cases were reported as having been treated successfully by Bouchut at the Sainte-Eugénie Hospital by large doses of tartar emetic. The three patients took the medicine according to the following formula:—Tartar-emetic, 75 centigrammes; syrup of poppies, 15 grammes; and gum-water, 100 grammes; mix; half a teaspoonful to be taken every hour. The quantity intended to be taken in the day was from 50 centigrammes to a gramme—that is, from  $7\frac{1}{2}$  grains troy to  $14\frac{1}{2}$  grains troy of the tartar emetic. There were two objects in view—the excitation of vomiting as a means of getting rid of the false membrane, and the mastery of the disease by the successive dynamic shocks. It is stated that the nurse, observing one of the three patients in a suffocative paroxysm from the presence of laryngeal false membrane, gave a double dose of the mixture with the addition of some tepid water. Forthwith, the child in a violent vomitive effort ejected a tubular membrane, two inches in

length. The incident is interesting, but it does not tend to justify the administration of tartar emetic in laryngo-tracheal diphtheria. Would it not have been equally efficacious, and much safer, to have administered an emetic dose of sulphate of zinc, followed by some brandy to sustain the feeble heart during the vomitive crisis?

*Tracheotomy*, through the opposition of the family, was too long delayed in the case of E. G. A similar difficulty often occurs in private practice. Each case has to be decided for its own merits; and the physician in charge must be in constant readiness with his instruments and appliances to perform tracheotomy at very short notice. In the majority of cases the actual crisis is so sudden as to leave no time to divide responsibility with a colleague. The patient must not therefore (if the attendant can help it) be put into jeopardy by waiting for a formal consultation, or till a surgeon can be found to admit oxygen to the craven lungs. On the other hand, if time permit, there is no emergency in medical practice in which it is more for the advantage of patient and practitioner that there should be a collation of opinions and a division of responsibility.

In the diphtheritic semi-asphyxiated child, tracheotomy is an operation requiring great care and a good light. There is no surgical difficulty, but the operator, if unaccustomed to use the knife, must be cautious. Nay, even an expert requires to proceed slowly, for children with turgid necks have been lost from hurried tracheotomy, performed with imperfect light, by good operators. The difficulty and danger of tracheotomy in diphtheritic children arise from the turgidity of the veins of the neck, caused by the state of semi-asphyxia. The sudden gush of venous blood which occurred in the case of E. G. illustrates this remark, and confirms its correctness.

The patient ought to be placed on his back on a table, with a narrow solid cushion so adjusted under the neck as to project and stretch the trachea. A quart bottle wrapped up in wadding, or in anything at hand, answers admirably. This being arranged, the operator, with the least possible delay—for the patient's position is a very trying one—makes an incision through the skin, in the mesial line, from the cricoid cartilage nearly to the sternum. The tissues ought then to be divided layer by layer, the gorged veins being carefully avoided, and the muscles and vessels being held to each side by the fingers of the left hand of the operator, or by two blunt hooks held by an assistant. When the trachea has been laid bare, a small incision is made in it, close to the cricoid cartilage, with a sharp-pointed bistoury, after which a probe-pointed bistoury is employed to complete the necessary opening. By means of the tracheotomy-dilator, or if that be not at hand,

by means of a common dressing forceps, the opening is dilated, and the operation completed by introducing a double canula, and then fastening it behind by tapes. As in the case of E. G. it may be necessary to draw out detached portions of false membrane before the canula can be introduced. In such cases, it is well to keep the opening dilated till the false membrane and mucosity have been got rid of by coughing or otherwise. The inner canula in some cases requires to be frequently removed and cleansed from obstruction. For such emergencies and for such occurrences as the grave accident which befell E. G., on the third night after the operation, a reliable attendant must be ready to intervene at a moment's notice.

Another method of performing tracheotomy in diphtheria has recently been made by Sainte Germain, of the Hôpital des Enfants Malades of Paris. The object in view is to avoid hemorrhage from cutting the engorged veins. A red-hot probe-pointed bistoury is the instrument employed. It is used in the first instance to burn through the skin, intervening tissues, and crico-thyroid membrane; and then by using the cutting edge, to divide the cricoid cartilage, and a few rings of the trachea. With the aid of Lalonde's dilator, the canula is then introduced.

Tracheotomy, like venesection, and the use of the stomach-pump, is a mechanical service, which every one who assumes the responsibilities of medical practice ought to be able to render to his patient at once, whenever the emergency arises. The question is not whether tracheotomy belongs to medicine or to surgery—that is of secondary importance—but whether every man ought not to save life when he can do so, by the use of his hand. It is expedient that some should specially cultivate medicine, and others specially cultivate surgery; but it is a great scandal when a physician in certain emergencies refuses to use the surgical knife, and when a surgeon in certain emergencies refuses to write a medical prescription.

*Local applications* intended to destroy, detach, or dissolve the false membrane in laryngo-tracheal diphtheria are in favour with many. Fortunately they are not so much relied on now as they were by Trousseau and those who wrote by his inspiration. This change of opinion is, as yet, more apparent in the conversation and current practice of French physicians than in their published works. It is now generally admitted that Trousseau attached an undue, and even a dangerous, importance to destroying by caustics the false membrane as soon as it appeared on the pharynx, and on any part of the visible mucous membrane of the throat. His statement that the destruction of the false membrane not only prevented the spread of the local mischief but even arrested the career of the general disease itself, is now denied by most French clinicians of repute. This change of opinion is for-

tunately likely to be permanent, for it has been clearly shown, and is now generally believed, that caustics, strong acidulated washes, and active chemical solvents, act mischievously by irritating the mucous membrane, and so exciting increased exudation of cacoplastic lymph.

Gargles, washes, and various other applications, if not of an irritating character, may be used with impunity, and sometimes with benefit. Some of them tend to promote separation of the false membrane without producing any rawness or hurtful irritation of the subjacent mucous membrane. The advantage derived from them is, we must remember, frequently temporary, and more apparent than real. So long as the disease is in the exudation stage, layer after layer of false membrane will continue to be deposited on the surface of the mucous membrane; and the rapidity with which this reproduction proceeds may more than counterbalance the benefit derived from the separation of the upper strata. It follows, therefore, that the only topical applications to be used are those which do not irritate.

Among the safe and more useful topical applications are glycerine and borax (of the *Br. Ph.*), lime-water, a very diluted solution of hydrochloric acid in distilled water, and a solution of one drachm of neutral sulphate of soda in eight ounces of water.

Moist warmth applied externally to the throat generally gives much comfort, and is in no way injurious. It greatly mitigates the pain arising from tumefaction of the cervical glands.—*Edinburgh Medical Journal*, June, 1876.

#### THE TREATMENT OF BOILS AND CARBUNCLES.

By DR. PETER EADE, Physician to the Norfolk and Norwich Hospital.

I think the usual treatment of boils and carbuncles, as set forth in works of medicine and surgery, may be briefly described as this. If seen within the first day or two of its appearance, we are told either to divide the pimple across, or to apply nitrate of silver to its apex; after this, we are told to poultice it, to apply cold compresses, or merely to use pressure; and, when the mass has grown large and tense, either to let it run its natural course, or to divide some portion, or the whole, of it by incisions or by caustic, and again to poultice, and so on.

In 1866, the late Mr. Startin wrote in the columns of the *Journal* of this Association that he regarded "boils and carbuncles as having frequently or constantly parasitic origin"—this opinion being grounded upon the success of his special practice, upon the fact of his having once or twice found cryptogamic vegetation in them like that of sycosis, and upon the observed fact that boils are occasionally propagated to other parts of an affected person, or even to other individuals by very close contact. But he said:

"My opinion of the parasitic nature of these complaints is chiefly influenced by the rapidly curative effect of the application of parasiticides to the apex of the boil or carbuncle." These parasiticides were various forms of caustic, such as iodine, nitrate of silver, caustic potash, chloride of zinc, blistering liquids and mineral acids, but the one which, for various reasons, he preferred to all others was the acid nitrate of mercury.

In my own practice, I have found these views of the parasitic nature of those diseases, as shown by the efficiency of destructive caustics, to be fully confirmed; but I believe that I have greatly improved upon Mr. Startin's practice, and that I have discovered that in carbolic acid we have an agent which is not only more safe, more manageable, and more universally applicable, but one which seems to be specifically destructive to the life and progress of both boils and carbuncles.

Boils are not uncommon, but carbuncles only occur in one's practice occasionally; but I may say that, in the several examples of carbuncle which have occurred to me recently, and in all the cases of boil, the carbolic acid has never failed—when properly and sufficiently applied—to arrest their growth and to abort them at once, if in an early stage; and to check their spread and prevent further extension in a later stage.

I believe it to be general experience that the pimple in which a boil begins its life and career may be destroyed by any common caustic, if thoroughly applied. I venture to assert also that a carbuncle, even when very considerably advanced and of very considerable size, may in like manner be destroyed by the free application of carbolic acid to its centre and other parts.

The essentials for its proper action, so far as my experience has gone, appear to be these:

1. The acid must be applied in *strong* solution (four or five parts of acid to one of glycerine is the strength I employ).

2. It must be brought into contact with the diseased tissue, for it appears to exert no influence on or through the unbroken skin. To this end, if sufficient opening do not exist when the case is first seen, a proper one must be fearlessly made in the very centre of the disease by some appropriate caustic, and, perhaps, the acid nitrate of mercury effects this better and with less discomfort than any other.

3. The acid solution must be occasionally reapplied to, and into, the hole thus formed, or those already existing, and I have found it a good plan to keep a piece of lint wet with a weaker solution constantly over the sore.

Take the following example, which has occurred to me within the last two or three weeks.

A lady, aged 40, showed me a boil on the left buttock, of six days' duration. It was circular with a diameter of four inches; was red and angry looking; tender, hard at its base, and

rapidly increasing. To the prominent point in its centre I freely applied acid nitrate of mercury over a space about one-third of an inch in diameter. Next morning, I removed the scab which had formed, and freely passed the strong carbolic solution into the little opening formed in the mass as well as I could with a quill pen charged with the liquid (and I may say that I find this a very convenient instrument for the purpose). At this time the swelling had increased considerably in size, was more tender and inflamed and painful, and was threatening to be a very formidable case of the disease. Now, mark the effect of the treatment. The acid was freely applied twice more, during the day, and the very next morning on my visit, it presented the appearance of having suddenly collapsed. It had shrunk greatly in size, was flabby, and far less painful, and its vitality was destroyed. In four or five days, nothing remained but a little hardness about its base, and it rapidly got quite well. No core was ever discharged, and no pus appeared after the first application of the carbolic acid.

Now, to what does such a history as this point (and I could give several such histories did time permit)? I think it says, as plainly as possible, that whatever the predisposing causes of boil or carbuncle may be, the disease itself is essentially a local one: that it is a disease parasitic in the skin or its sebaceous glands, and that it begins with a central portion or stem, from and round which, as a root, the rest of the mass grows and extends. The spreading fungus-circles common in our meadows, and known as fairy rings, give us an excellent illustration of the type of growth; I think that the singular and constant effect of the destruction of the central portion in the way I describe, proves (as Mr. Startin thought) that which it is so difficult to demonstrate with the microscope.

I do not say that, when a huge carbuncle with its enormous growth into, and infiltration of surrounding cellular tissue has taken place, carbolic acid or anything else can be relied on absolutely and at once to stop its progress. It will probably then to some extent run through the stages of its life history, but I believe that this is entirely because destruction of its centre is no longer the destruction of the life of the circumference, and because of the difficulty or impossibility of bringing the acid into contact with enough of the diseased mass. But even in a case or two of very large carbuncles, which I have seen for the first time in their later stages, and where the acid has been freely and assiduously passed into every hole which existed, I have been greatly satisfied with the apparent effect of the acid; and certain it is that, *wherever it touches* diseased tissue, all sloughing and suppuration at once there cease, no further extension of disease takes place, and a more striking change from dirty slough to

florid granulation occurs in the course of a very few hours. So much have I been struck with this, that I propose when the opportunity of a large developed carbuncle offers, to inject a watery solution of the acid into various parts of the diseased mass, in the hope of thus completely destroying it even at this stage.

To sum up, the doctrines implied and acted upon in this paper are:

1. That boils and carbuncles are not mere inflammations and sloughings of cellular tissue, but specific diseases.

2. That they are parasitic, and, as such, endowed with a definite life and history.

3. That, in their early stages, they may be infallibly destroyed and aborted by destruction of their central stem or root; and that, even after this stage has passed, they may generally be destroyed, and in all cases, at the very least, greatly modified, by the free application of carbolic acid.

4. That, to produce this result, the acid must be freely introduced into the central portion of the disease, and also into any other part where an opening exists or is formed artificially.

Until lately I had been in the habit of using a much weaker solution of the carbolic acid in oil or glycerine than I have spoken of above; but I now find that, when used in small quantities, the stronger solution is quite safe and very slightly irritating, whilst its destructive power is, of course, much greater. Where, therefore, it is only intended to insert a small quantity into the mass, I advise that it should be of full strength; but where it is to be used more freely, or over a large surface, I only employ it much more dilute. The only constitutional effect I have ever witnessed from its free external application is the well-known blackening of the urine, and this has never appeared to produce the slightest evil result.—*British Medical Journal*, July 1, 1876, p. 5.

#### SUBNITRATE OF BISMUTH IN THE INTESTINAL HEMORRHAGES OF TYPHOID FEVER.

In the intestinal hemorrhages which supervene in the course of typhoid fever, Dr. Martineau (*Lyon Médical*, August 6, 1876, from *Gazette des Hôpitaux*) recommends, on account of its perfect harmlessness, subnitrate of bismuth. He administers this remedy every half-hour, until the cessation of the hemorrhage, in powders containing one gramme (fifteen grains). This method is derived from the practice of Monneret, who, considering that bismuth acted specially as a mechanical agent, so to speak, covering the inflamed and ulcerated mucous surfaces, always employed it in preference to giving half doses. In five patients whom Dr. Martineau had thus treated the result has been well and rapidly attained.—*London Med. Record*.

## SCARLATINAL ALBUMINURIA.

This distressing sequela of scarlet fever too often frustrates the hopes inspired by convalescence. In the report from Berks county, Pennsylvania, in the State Medical Society *Transactions*, we read, "many children succumbed to it." In the same volume Dr. S. D. Bell, of Butler county, tells us that he has given up the old treatment by bitartrate of potassa, spirits of nitre, acetate of potash, etc., as unsatisfactory compared with the decoction of scoparius. This, he states, yielded "invariably the most flattering results." He used it in the form of decoction, made by boiling half an ounce of the tops in a pint and a half of water down to one pint. Of this a tablespoonful to a wineglassful was given every four or six hours, according to the age and severity of the symptoms.

## ACTION OF CHLORAL ON THE RECTUM.

It would appear that chloral is one of those agents which act with nearly as much energy when introduced in the rectum as when taken into the stomach. In a case of puerperal convulsions to which we had been called in consultation, a solution of bromide of potassium with hydrate of chloral, which could not be swallowed by the patient, was injected into the rectum, with the effect of allaying spasm promptly and decidedly. It was repeated in the same case with excellent results. Since that time other trials of chloral as an enema have confirmed its value in this mode of administration. The quantity of thirty grains in two or three ounces of water will generally be sufficient for a single injection.—*Pacific Med. Jour.*

## THE STATUE TO THE LATE SIR JAMES SIMPSON, BART., M.D.

Concerning this statue the *British Medical Journal*, Oct. 28th, says:

"The bronze statue of the late Sir James Simpson is now in the artist's hands, and stands ready to be removed to the site fixed upon for it, viz., in the East Princes Street Gardens, as soon as the pedestal on which it is to stand shall be erected. The casting produced by Messrs. Masefield, of Chelsea, turns out to be one of unusual excellence. The statue represents the subject in the sitting posture, and is eight feet in height, corresponding to a standing height of twelve feet; the pedestal is to be ten or eleven feet high. Sir James is represented in academic robes, sitting erect with the face turned towards the left shoulder, in the attitude of a man earnestly enforcing his convictions, the while right hand supports one side of a large book which rests on the knees, the left is engaged in turning over the leaves. In modelling the massive head, Mr. Brodie had the busts executed by himself from the life, and he has been very successful in reproducing both the features and

the tenacious expression of the original. This part of the casting is peculiarly effective in the sharpness and precision with which it gives every touch of the graving tool; and the same may be said of the hand, in which the sculptor has vividly realized another characteristic feature."

## EXTRACTION OF FOREIGN BODIES FROM THE EAR.

Mr. Geo. P. Field refers to the case of a little girl, æt. 6, who presented herself with a black glass bead the size of a large pea in her left ear. Previously, however, several attempts had been made to extract the bead; but, unfortunately, the mischief was only increased, the bead having been pushed in still deeper, and firmly imbedded, the result of subsequent inflammation. The ear was syringed gently, and any further attempt at removal was postponed, as there was a good deal of inflammation for a few days. She was, however, laid up with chicken-pox. for two months; and when she came again to the hospital all inflammatory signs had disappeared, but the bead could easily be distinguished with the speculum, deeply seated and firmly fixed. She was put under chloroform, and an attempt was made to remove it by means of glue attached to the end of a piece of stick. This failed altogether. She was, therefore, placed on her side, with the affected ear downwards, and the syringe used from below; and, after a little trouble, the bead dropped out. This is a case that one is likely to meet with almost every day. A great deal more harm than good is often done by the use of instruments; but by the following method no injury can be caused. Place the patient under chloroform, with the ear affected downwards, and syringe from below. Pull the auricle backwards and upwards (by this means the external auditory meatus is made into a straight tube), and apply the nozzle of the syringe to the upper wall of the passage. The water is then gently forced behind the obstruction; the foreign body is loosened, and its own weight will cause it to fall out of the ear.—*British Medical Journal*.

## BARBER-SURGEONS IN BRITTANY.

In a work on surgeons and barbers in Brittany, M. Closmadu has recorded some curious facts of practice in the sixteenth century. Venesection was abundantly practised; to such an extent that the *chevins* were obliged to lay down regulations for the disposal of the blood, and to prohibit its being exposed to the view of passengers or thrown into the gutter. At Rheims, the barbers were prohibited from keeping pigs—why, is not stated. The fee for venesection was ten *sols* (fivepence); for extracting a tooth, five *sols*. M. de Montconys, travelling in Brittany in 1645, learned from a young surgeon, among other secrets, that the injection of warm fox's blood into the bladder was a sovereign means for dissolving calculus; and that to cure quartan fever, a white herring suspended by



the middle, with the head downward, should be applied to the spine. A little later, the clergy strongly recommended a collection of domestic remedies made by Madame Fouquet, among which was an ointment of horse-dung and fresh hog's lard for dressing bruises; the dung being that of a black horse which had been at grass for fifteen days during the month of May. The monks were in the habit of prescribing such remedies as the following: For quinsy, apply a poultice made of the faeces of a healthy boy who has been fed three days on rabbit with well-baked bread, containing little leaven and salt. In cases of difficult micturition, apply to the penis, or near it, a poultice or liniment of fleas, caught in beds, in oil of sweet almonds; or, what is better, introduce two or three bed-bugs or fleas into the urethra.—*The British Medical Journal*, February 10, 1877.

#### CARBOLIC ACID IN SIMPLE ANGINA, DIPHThERIA, AND CROUP.

According to Lemaire, carbolic acid water ( $\frac{1}{2}$  or 1 part to 100), used as a gargle, is an excellent means for combating simple anginas. The sensibility of the mucous membrane and the other abnormal symptoms are promptly extinguished under the influence of this remedy. In the more severe throat affections, such as diphtheria and croup, the same agent is recommended as a gargle ( $\frac{1}{2}$  to 100), as a cauterizer (2 to 100), as an inhalation, and as a drink. Declat tried the same remedy with good result internally, externally, and as a hypodermic injection, using in the last method 5 grammes of a solution of the strength of 1 part to 100. The observations reveal that the false membranes separate, and the subjacent mucous membrane is modified by the treatment.

The carbolic acid does not act as a cauterant, for dilution produces beneficial action; and it is not demonstrated that it exerts any chemical action on the false membranes, as some have thought. It appears most reasonable that it acts as a parasiticide, destroying the proto-organisms which constitute the fundamental part of the false membranes, and which exist in the circulatory system, since the local alterations are no more than the expression of zymotic influence.—*O Correio Medico*, Lisbon, 1876, p. 274.

#### CHLORAL AND CHLORATE OF POTASH IN DIPHThERIA.

Dr. Ciattaglia strongly recommends the local application three or four times a day of a mixture of chloral (one drachm) and glycerine (five drachms). Since he has employed this he has met with remarkable success. He gives internally chlorate of potash in doses of two and a half to four drachms for children and five drachms for adults per diem, dissolved in thirty-

five drachms of water. He had already derived great advantage from the chlorate, but since he has combined with it the local use of chloral his success has been much greater. The development of the diphtheritic patches is arrested, and the disgusting odor of the disease disappears, if not at the first, at the second application. The chloral, also, is much more manageable in glycerine, the burning sensation being less, while it is longer retained in contact with the parts than when dissolved in water. It is also harmless even when clumsily applied.—*Presse Med. Belge*, August 13.

#### SIROP MAGISTRAL.

This syrup, which is mentioned in D'Espine and Picot's *Manuel des Maladies de l'Enfance*, is much used at Geneva as a tonic for emaciated anæmic children. The formula for it is as follows: Cream of Tartar, 500 parts; Iron Filings, 96 do.; Cinamon, 16 do.; Sugar, 2000 do.; Orange-peel, Rhubarb, each 32 do.; White Wine, a sufficiency. A spoonful night and morning. A. SHEWEN, M.D.—*The London Medical Record*, February 15, 1877.

#### CANCER: INJECTION OF BROMINE.

We saw, also, with Dr. W. Williams, a woman, aged 50, whose cervix uteri had been amputated for epithelial cancer, by Mr. Baker Brown, eight years before. The actual cautery had been applied later by Dr. Routh, and, later still, Dr. W. Williams had injected bromine at three sittings, after which the whole of the affected part came away, and complete healing took place. The parts were now quite sound. There was apparently only an inch of uterus left. The solution used is one part of bromine to three of rectified spirits. This develops heat, and should be prepared before being carried for use. From five to ten minims are injected into the tissues by means of a long syringe with platinum nozzle and india-rubber piston. It is desirable to remember that it may destroy the sense of smell in the operator; but this loss may be prevented by alkalined cotton-wool placed in the nostrils.—*British Medical Journal*.

#### PICRIC ACID FOR SORE NIPPLES.

Picric acid has not hitherto been much used in medicine. Dr. Charrier, in the *Courier Médical*, recommends it in sore nipples. After washing well with tepid water, he paints, by means of a camel-hair brush, the chapped surface with a solution of picric acid 4 grs. or 4½ grs. to 1 oz. This is repeated every day. Besides which he directs the nipple to be held after each time of suckling in a glass filled with a weaker solution—2 grs. to 1 oz.—of picric acid.



## A REMARKABLE OCCURRENCE.

In the current number of the *Veterinary Journal*, a correspondent, an army veterinary surgeon, states that some men of the Native Infantry Regiment stationed at Cawnpore went out shooting, and in the course of the day came upon an antelope doe, which they immediately shot dead, and carried home. On opening the animal for the purpose of preparing it for the pot, they released a strong healthy youngster from the uterus, washed it, and induced it to suck milk from a bottle. "This little fellow is still living and thriving well under the care of the band-master of the regiment, by whom the above was related to me. Now, the peculiarity of the case is this,—that the time from when the mother was shot until the young one was released could not possibly have been less than twenty-five minutes. I have taken every care to verify the story, and can find not the least exaggeration in it."—*Med. Press and Circular*.

## THE CANADA MEDICAL RECORD

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This month we send out bills to some of our subscribers who have not paid their annual subscriptions. Prompt attention to these reminders will be a favor to us, and obviate any repetition of the act of presenting a bill a second time, which we assure our readers is as disagreeable to us as to them.

## TESTING THE URINE FOR ALBUMEN.

Dr. W. H. Kesteven recommends the following method, in the *Lancet*:—

Take a thin glass microscopical cover (about one inch square is the best size); on this place a drop or two of the urine to be tested; then, with a pair of ordinary dressing forceps, hold the cover over the flame of a candle. At the same time the under surface of the glass will be blacked by the smoke, and the urine will be boiled. If there is any albumen, the black under surface renders the white precipitate evident.

Urine may also be tested cold with nitric acid with the same apparatus. A drop or two of the urine should be placed slightly on one side of the centre of the surface of the glass,

and a drop of nitric acid on the other. By inclining the glass, the two will mix, and after the fumes which result from the mixture have passed away, it will be readily seen if there is any albumen precipitated.

In the first experiment care must be taken not to boil the urine too rapidly, or it will be evaporated. In the second, the resulting precipitate is rendered more apparent if the under surface of the glass has been previously coated with Brunswick black or some other dark substance. A few of these covers can be carried in an ordinary pocket dressing-case, and afford a ready means of testing urine at the patient's house.

## PERSONAL.

Dr. Joseph Carson, an eminent physician of Philadelphia, died December 30th, aged sixty-eight years. He was for many years the Professor of Materia Medica in the University of Pennsylvania, which position he resigned last spring in consequence of impaired health. For many years he was Vice-President of the Pennsylvania Historical Society, and was identified with many scientific associations.

## MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

March 9th 1877.

DR. PERRIGO read a paper on "Three Cases of Placenta Prævia."

First case.—Woman's health previously good, sudden onset of hæmorrhage while at a meal. Dr. Perrigo was immediately called. He found that the hæmorrhage had ceased; os dilated to size of a 50 cent piece and soft; placenta adherent by right half; pains firm and rapid. At end of a half hour, during which time no hæmorrhage had occurred, he examined again and found the os twice its size at the previous examination; ruptured the membranes, after which labor was rapidly completed without any further interference or any further hæmorrhage. Dr. Perrigo drew attention in this case to the sudden onset of the hæmorrhage with the commencement of labor, and to the rapid and successful issue, without any operative interference.

Second Case.—Hæmorrhage three weeks before full term. After slight hæmorrhage through the day, the doctor was called. He felt a soft mass through the walls of the uterus, and

thought that he had a case of placenta prævia; applied plugs; removed them next morning; no hæmorrhage. On the following morning found the plugs saturated with blood, and the os dilated to the size of 20 cents; a gush of blood with a pain; gave ergot and brandy; os dilated quickly; delivered by forceps. Delivery was followed by a gush of blood, but the uterus contracted well. Child dead.

Third Case.—A very desperate case—Found woman in a state of syncope; no radial pulse, and all the signs of fearful anæmia. Gave brandy and milk freely; the bleeding recurred when the patient recovered from the swoon. Os the size of 50 cents; placenta centrally attached; perforated the placenta with his hand, and turned; did not deliver immediately after turning; uterus contracted and no hæmorrhage followed. The patient recovered after six weeks in bed.

Dr. Trenholme objected to detaching the placenta in the second case after the hæmorrhage had ceased. Dr. Barnes only detached the placenta in order to arrest hæmorrhage. Objected to tearing through the placenta in the last case in which the placenta was centrally attached; might open frightful sources of hæmorrhage. Dr. Barnes teaches to puncture with an instrument in order to allow the fluid to escape and the uterus to contract. Also spoke of the possible benefit in desperate cases, of the injection of milk into the veins. Thought that turning was the proper operative measure for the following reasons: (1) It enables you to find the exact position of the placenta; (2) the arm forms a plug, and (3) the legs of the foetus form a plug.

Dr. Hingston thought there was no invariable rule to follow. Rarely was perforation of the placenta warranted; it was a hazardous practice. The speaker rather favored non-interference.

Dr. Alloway suggested the use of the bipolar method of version where it was possible, in order to avoid the shock of the introduction of the arm into the uterus.

Dr. F. W. Campbell, drew attention to the fact that in Dr. Perrigo's cases the hæmorrhage did not set in till labor was commencing, which was not usual—perhaps explained by the recent observations of Dr. Isaac E. Taylor, of New York, that the os did not always dilate at all till labor actually commenced, and that the cer-

vix was not obliterated in pregnancy. Asked why Dr. Perrigo did not deliver immediately after turning in the last case. Objected to Dr. Hingston's remark that cases of this kind would generally do well without interference; mortality was 1 in 3.

Dr. Trenholme again rose, and spoke with reference to dilatation of the os before labor. In multiparæ there is a dilatation of the os at eighth month or last two weeks of gestation. Has been able frequently to recognize the position of the head three weeks before labor. Never so in primiparæ, and therefore hæmorrhage was more likely in multiparæ.

Dr. Perrigo replied, he did not complete delivery immediately in his last case, because he would rather subject his patient to two slight shocks, than one great one in her condition; she had fainted while his hand was in the uterus. In the second case he detached the placenta as a precautionary measure against the recurrence of hæmorrhage, and considered that practice advisable.

Dr. Osler exhibited several interesting pathological specimens:—A large abdominal tumor cancerous in nature, sent to him by Dr. Malloch, of Hamilton. The tumor weighed 40 lbs.; there were secondary deposits in the liver and lungs; it had originated in the retro-peritoneal glands. An example of Lobstein's retro-peritoneal cancer, a very rare disease. Also cancerous disease of the 7th cervical and 1st dorsal vertebrae, and of some ribs with secondary deposits in the liver and brain, from a man who had died in the General Hospital, of chronic phthisis; one lung of same subject with cavities and numerous fibrous bands. Specimen of perforation of lung from a case of phthisis, which had proved fatal in the General Hospital from pneumothorax, interesting from the fact that the perforation communicated with a small cavity of the size of a pea, while there were numerous large cavities with thin walls in the same lung. From the same case (a young girl of 21 years) a dermoid tumor of right ovary, of the size of a large hens egg, containing in its sac true dermoid structure with hairs growing from it, and covered with sebaceous matter, and bone and other structures in the centre. Also a specimen of acute necrosis of the lower end of the tibia, from a periosteal abscess, from a patient who had died of pyæmia.

## Original Communications.

*Valedictory Address to the Graduates in Medicine,* delivered at the 6th Convocation of the Medical Faculty, University of Bishop College, by E. H. TRENHOLME, M.D., B.C.L., Prof. of Obstetrics and the Diseases of Women and Children.

MR. VICE-CHANCELLOR, LADIES AND GENTLEMEN, AND GRADUATES OF THIS UNIVERSITY,—To me it is no small pleasure to have the honor of addressing a few farewell words to you, gentlemen, Graduates of the year 1877. Mr. Chancellor, upon any occasion this would be a pleasant and happy duty, but much more is it so upon the present occasion, when it has been our pride to present, and your good will to bestow, the honorable and highly esteemed degrees of C.M., M.D., of this University, upon as able a lot of young men as any Faculty could wish to graduate from their school. I speak no words but those of truth and soberness when I say this Faculty and this University expects her children to take the very foremost rank in the honorable roll of the eminent. Already your young Faculty has its students in the teaching body of your Medical School. We are gratified, therefore, and trust that you also will note with pleasure such marks of progress as to-day are presented to you. Your young school has taken a stand of perfect equality with the other medical schools of Canada. Our most active opponents in past times claim no superiority over us now. The Royal College of Physicians and the Royal College of Surgeons, England, have accorded this Faculty the same favor and privileges as those granted to any other school outside of Great Britain. That the honor in which we are held abroad is well merited, the continued success of this school attests. Already fifty-three doctors have graduated from these halls. The number of enregistered students have steadily increased. This year forty-six have entered their names upon the Registrar's book, and the prospect of large attendance next year is very flattering indeed. Your Faculty has announced the establishment of a summer course of three months, to begin 1st of May and end 31st July next. The work thus proposed to be done is intended to be thoroughly practical, and, so far as possible, clinical.

Earnest, hard-working students will find this course of great value, and an additional inducement to stop in town and walk the hospitals. Our object, in a word, is to thoroughly equip our graduates to efficiently perform their life work. I said the summer course was specially intended for the aid of earnest workers; well, it is so, and so is our regular sessions work also—Bishop's College wants none other. Those who wish to obtain an entrance into the profession of medicine without true and honest work must apply elsewhere; we will cheer and encourage all, but we will favor none. The results of the practical appreciation of these views we trust to present to your honorable convocation, from year to year, in increasing numbers. When we glance over the past six years, since this medical faculty was first ushered into life, when we recall the pressing trials and the not inglorious victories that have crowned our short existence, we think an abundant, yea, more than an abundant, answer is given to all who have challenged our right to live. Gentlemen, we intend to live, and, God willing, to live as a medical school to some purpose. 'Tis true we are young and poor, but we are not without hope that this University will shortly provide us with a college building, where, unencumbered by rent, we will be placed in a better position to pursue our work with success. The survival of the fittest is the modern gospel of certain scientists. Without pushing this theory too far, we may, from a retrospect of the past, not unreasonably look forward to a brilliant future. When, some seven years ago, Mr. Secretary, I had the honor of first communicating with you about the establishment of a medical school in connection with this honorable University, sanguine as were our hopes, they have been far more than realized. The beginning was small, but faith and hope were there, backed up by an earnestness of application that would brook no contradiction. We were earnestly resolved to live, but, at the same time, to live honorably and well. Young and little known, we gratefully appreciated, and do still appreciate, your many acts of kindness and encouragement, which have cheered us while passing through conflicts, out of which, we are proud to say, we have emerged triumphantly. We have successfully competed with rivals of long standing and high reputation, and

that, too, without resorting to any illegitimate or dishonorable means. Nay, more, from the outset our curriculum embraced a larger field and required a greater expenditure than that of our rivals. We have labored under the disadvantage of not having any of our faculty attending physicians of an hospital, and yet our work prospers. This felt advantage will, we sincerely hope, be shortly removed, and, by the commencement of another session, the students of this Faculty will have at their service the very best field in Canada for the practical study of surgery. During the past year your Faculty has acquired "The Woman's Hospital of Montreal," where the important obstetrical and gynæcological branches of medicine are practically taught to the student. The importance of this acquisition can only be realized in time, when our graduates have shewn, as we reasonably hope, their decided superiority in these respects over competitors from other schools. We are pleased also to record no break in the personnel of the Faculty, and are happy to acknowledge the indefatigable zeal of our honored Dean—we wish him long life and health to fill his post with us! We have added to this faculty lecturers on various branches in the proposed summer course already alluded to. One of these, the first appointed, has already shown his worth by most efficiently filling the chair of surgery during the previous session. His name and personal presence is not unknown to Lennoxville, a young surgeon of promise, the son of one of our earliest and warmest friends, whose loss we all sincerely deplore. I refer to Dr. G. F. Slack. Mr. Chancellor, ladies and gentlemen, it is time to return from these digressions and occupy the remaining moments with the subject proper before me. Gentlemen graduates, this day marks a memorable point in the history of your life. Your teachers are gratified to recognize you as thoroughly qualified to enter upon your professional career. As well trained we expect you to strive for the mastery and win the prize of life. If all cannot be successful, at least successful in the same degree, let each one prove himself worthy of success, and be content to fail with a good conscience, rather than resort to doubtful means to gain your purpose. Gentlemen, you are beginning the real struggle of life, and, believe me, that your former teachers will ever watch your progress with intense

interest. Your success will be our honor, and your failure our sincere grief. So far as it is in our power we wish to strengthen your hands, and will ever be at your service with such counsel and assistance as we are able to give. We believe you know enough to enable you to realize that you know nothing as you ought to know it. The knowledge you possess but qualifies you to wisely investigate the subtle workings of the human frame. That you will be diligent in your profession we doubt not, but, gentlemen, I trust you will be much more than workers and gatherers of facts. I earnestly trust you will rouse your best energies and be men, self-reliant, wise to discern, strong to execute. The accumulation of observations are valuable *only* so far as they enable you to successfully interrogate nature. The knowledge you possess must be made your own, a part of your very being. If it is to profit you. While holding such master minds, as have written so ably on medical matters, in just and unfeigned respect, let not the words or thoughts of any stamp out your right to investigate and act for yourself. Dare to be yourself—dare to be a man among men—take stock of yourself, and ascertain what you do and what you do not possess—be not uncertain about your work; vacillation is almost as bad as ignorance. Not only know yourself, but believe in yourself, if you would have others believe in you. Where you find a lack, bend your energies to supply the want. When obscure phenomena present themselves, seek out a solution to the problem, and then gather facts (accurately observed) to test your hypothesis. It is by the pursuit of this course that the greatest advancements have been achieved in the science of medicine. To gather facts with an object, it is this that gives zeal and pleasure to your work. It is the possession and exercise of this faculty that distinguishes the man of genius from the indefatigable but aimless worker. During the earlier years of your practice occupy your time diligently in gaining further insight into your profession and keep (then and ever afterward) well abreast with the current literature of the day—neglect of this will cause you to lag behind and leave you distanced by your competitors. Many things are done now with success that a short time ago were not even contemplated. The knowledge of to-day will not serve for to-morrow. You must move onward

or retrograde. No two minds are alike; hence it is the bounden duty of each person to contribute toward the stock of general knowledge. By so doing we live not to ourselves but for the good of all. Be diligent and true to your mission, and you may rest assured your work will endure and your example shine clear, long after the ephemeral glitter of the superficialist has gone out in the darkness of oblivion. There are many fields of medical enquiry awaiting special investigation. Very likely each of you have already felt strong inclinations for some branch of the profession. Be not hasty to follow such predilections but rather seek to lay the foundations of your future success, broad and deep, on a thorough knowledge of all the branches of medicine without which, rest assured, nothing great in any special department will ever be realized. I have no desire to overwhelm you with advice, yet there are two subjects I cannot refrain from saying a word upon, viz.: liquor and opium. It is true that it is fashionable now-a-days to denounce the use of alcohol—well I am right glad it is so—I shall rejoice when the evils of intoxication are known no more, and believe it is our duty to encourage legal measures for the restraint of a source of evil, the results of which are so well known to medical men. The appetite for alcohol is so easily formed and rekindled in those who have once been its victims that it behoves you to be very cautious in prescribing an agent so powerful for harm. Many a one has manfully resisted this besetting sin till, by the physician's advice, the poison roused the uncontrollable passion to the present ruin of himself and family. I speak feelingly upon this subject, because I was upon one occasion the cause of such a deplorable result. With regard to opium, there is need for much judgment. I do not speak of its priceless value, rightly administered, but of the growing habit among our people of what is justly called "opium eating." There may be solitary instances where this deplorable habit has been acquired without reference to the doctor's advice; but, in the vast majority of cases, however, there can be no doubt that it has resulted from the too long continuance of the drug as prescribed by the medical attendant. You cannot be too cautious in administering this drug, especially to ladies who, from their peculiar and delicate nervous temperament, form the habit more readily than do

men. The continuous resort to opiates for the relief of pain should never be permitted except to those dying from some malignant and incurable affection. Without dwelling upon these subjects, I would urge their importance upon you, gentlemen, as graduates of this University. The Faculty also desire to express our grateful appreciation of your gentlemanly conduct during all your college course. By your earnestness, attention and zeal to acquire the principles of your profession, you have made the lecture hour a time of pleasant intercourse; not for the dry parading of facts, but for the happy display of deeply interesting matter in something of its own lovely attractiveness. We have sought less to instruct than to educate you—less to cram than to help you to discern the workings of the laws of nature. That our course in this respect is a wise one we doubt not, and will leave it for your lives to testify, as well as those of your fellow-graduates from this University.

Gentlemen, remember the responsibilities you this day assume. Remember the tie of fealty and love by which you are bound to your *Alma Mater*. Let your position and success in life be what it may, never forget to seek her good. This connection, this responsibility can never cease so long as in *very truth* she is your *Alma Mater*. I say not but that you would be free from this your oath if she ceases to be a loving mother to you. When she becomes a step-mother, and only then, can you rightly seek for a separate existence, or associations elsewhere. Gentlemen, you have entered upon a path a loftier and more God-like than which is not, in my judgment, open to mortal tread. A keen sense of the great responsibility should ever rest upon you. There is much of sorrow, much of joy; much of life, much of death dependent on the wisdom and grace with which you pursue your course. Not only is it your province to wisely wield the surgeon's knife, or successfully deal out God's remedies for the diseased body, but you will be the trusted councillor of many a troubled heart, and the faithful confidant of many a secret that never could be breathed in any other ears. You need wisdom of the heart, as well as wisdom of the head, to rightly fulfil your mission to a suffering, sinning and dying world. May you be true to yourselves, your profession and your God. Scatter

sunshine, happiness and health on your way through life, and may the blessings of those ready to perish be yours, as well as the full enjoyment of earthly rewards, and the exceeding joys of the world to come. Gentlemen, God speed you. Adieu.

*Stricture of the Rectum—Successful operation by* WOLFRED NELSON, C.M. M.D., Attending Physician Montreal Dispensary; Physician and Accoucheur to the Female Home; late Assistant Demonstrator of Anatomy, Medical Faculty University of Bishop's College, Montreal. Read before the Medico-Chirurgical Society of Montreal, on the 16th of March, 1877.

The subject of this paper, Madame G., a small French Canadian, aged forty, consulted me on the 24th day of November, 1873.

*History.*—A married woman, has five children, now living, with her second husband. She complained that four years before consulting me, when pregnant, she was greatly troubled by obstinate constipation. She had also had some uterine trouble, with prolapsus, for which she had worn a pessary. After her confinement the constipation continued and was augmented. Two years before calling on me she was treated for it by a doctor in Lachine.

She now complains of pain in the abdomen, etc., the scybalæ passed are in little bullet-shaped pieces; at times they come away in long pieces, of the size of a lead pencil, and an inch or two in length, their passage being accompanied by intense pain, at times followed by blood and matter.

Suspecting at once that I had a case of Stricture of the Rectum to deal with, an examination was asked for. Patient was placed on her left side, (British Midwifery position) after oiling the index-finger of the right hand, it was introduced, when a well defined stricture was easily diagnosed an inch and a half within the sphincter; its edges were hard and corrugated; the aperture in the centre was about the size of a lead pencil; it firmly resisted an attempt to pass the tip of the index-finger; the examination caused considerable pain; found a little blood on the finger afterwards.

Her general health had been bad; appetite changeable; at times she had had slight diarrhoea. I could get no history of any syphilitic taint.

On the 27th of November a second examination was made, *per anum*; she reported that she had had no motion from the bowels on the 25th, and only a very small one on the 26th, she consented to an operation.

On the 29th of November, at 11 a. m., assisted by Dr. David, Dean of the Medical Faculty of Bishop's College, and Dr. Reed, the operation was done as follows:—Patient was placed in a stooping position, face and arms resting on her bed, feet on floor, abdomen raised by pillows; this placed the parts in the most convenient position. My confreres then examined the stricture; all being ready I sat down in a chair, directly back of her, oiled my left index-finger and passed it to the seat of trouble; over it a guarded bistoury was carefully passed, and slightly within the ring. The stricture was then divided or nicked, first to the right and then to the left of the median line; withdrew bistoury and examined cut surfaces, when the tip of the index finger passed beyond. Not considering the passage sufficiently large, a third incision was cautiously made anteriorly, in the median line; withdrew bistoury and easily enlarged the opening with the finger, after which two fingers could be passed with ease their full length; just beyond the stricture the membrane was soft and natural. A long narrow sponge tent, measuring an inch and three quarters was then introduced. I have omitted to state that such was the hardness of the stricture, the cutting of the knife caused a creaking sound that was perfectly audible in the quiet room. No chloroform was administered, not more than a teaspoonful of blood was lost during the operation, and it caused but very slight pain. Put her to bed, and gave 1 grain P. Opii. and a second dose at 2 p.m., when the pulse was 68. The sponge tent caused a little pain; patient was cheerful and very much pleased with the result.

The sponge tent used was one made for the occasion by myself, of fine turkey sponge. It was purposely made very long, that it might extend well beyond the stricture on both sides, and remain *in situ*. It had been soaked in carbolic lotion, &c.

At the 2 p.m. visit the pain complained of was of a burning character, which she located at the seat of stricture. At 7:30 p.m. same day she felt easier; pulse as before, no fever, and remained quiet in bed.



Nov. 30th—1 p.m.—Pulse 88; pain gone; abdomen full and tympanitic. She passed a good night; states that she can feel the rectum distended by the sponge tent. While she keeps the horizontal position it gives no trouble. Once or twice, when she attempted to sit up, she felt it. The burning that it caused at first has disappeared. 9:30 p.m.—Pulse 88; abdomen painful; no pain in the rectum; desires to go to stool. Gave a very large dose of castor oil.

Dec. 1st—8 a.m.—She had two very large motions during the night, the first at 2 a.m., when the sponge tent came away. The stools half filled a large chamberpot. The act was unaccompanied by pain. Tongue cleaner; she felt a little weak, otherwise feeling very well. I saw the matters passed. They were partly fluid. Several large and hard pieces were present. After the second stool the tympanitic condition disappeared. She looks better. 1 p.m.—Feels very well. At 6 p.m. she got up and had tea with her family. She had a third large motion. Ordered a half-grain pill of podophyllin at bed-time. Pulse 80.

Dec. 2d.—Dr. Reed saw the patient with me. We found her sitting up, feeling and looking well; pulse 78. She eats very well; tongue cleaner; eyes bright; says that she feels herself a new woman.

Dec. 3d.—Passed a very good night; pulse 78; two full stools followed the pill.

Dec. 4th.—Patient up and at work; pulse 76. She is very cheerful; gave another pill at bed-time.

Dec. 5th.—Passed a good night; had two full stools; ordered another pill as before.

Dec. 7th.—Has had eight full stools since last visit; discontinued pills, feeling that the canal must be pretty well emptied; discharged patient.

From that day to this she has had no trouble. She is a hard-working woman. The operation in general is that laid down in my late father's monograph on "Stricture of the Rectum."\* In the event of my meeting with a case of simple fibroid stricture again I should adopt the same *modus operandi*, as the results were all that could be desired.

This is a simple report of the case. Its

etiology, pathology and treatment in general, with the present views on the same, are left to the reader to enquire into, if so disposed, in the text books on surgery, and surgery of the rectum in particular.

1 St. James Place—199 Canning Street West.

*On the Application of Fuming Nitric Acid to the Interior of the Uterus*, by T. JOHNSON ALLOWAY, M.D., L.R.C.S., L.R.C.P., Fdin., Attending Physician to the Montreal Dispensary and Protestant House of Industry and Refuge. (Read before the Medico-Chirurgical Society of Montreal, April 13th, 1877.)

GENTLEMEN,—The treatment of uterine disease, principally chronic inflammation and its consequences, of the endometrium, by the local application of nitric acid, has of late created some comment as to whether or not the operation is a judicious and safe procedure; and although a few have placed before the profession their experience of its results, there is but one gentleman who is especially responsible for its introduction into general practice—I allude to Dr. Lombe Atthill, of Dublin, one of our most prominent gynecologists of the present day, and author of "Clinical Lectures on Diseases peculiar to Women." In this work (page 83) Dr. Atthill says, in speaking of the nitric acid treatment for the cure of granular ulceration of the cervix uteri:

"I believe that not a little of the opprobrium which rests on obstetric practitioners for the length of time over which their treatment extends is due to excessive timidity and to the use of inefficient remedies."

This and other assuring expressions in Dr. Atthill's work have led me, and, I have no doubt, many others, to apply nitric acid to the interior of the uterus without the slightest fear of untoward consequences supervening, which from my own personal experience I cannot easily forget, and which may place any physician in a very unenviable position.

My first case was Mrs. W., aged 27; weight, 180 lbs.; had been married ten years; no children at full term; had one miscarriage nine years ago at three months' pregnancy. From date of this miscarriage had no freedom from all the aggravated symptoms of endometritis and endocervicitis; menstruation fairly regu-

\* Dr. Horace Nelson on "Stricture of the Rectum."

lar; always scanty; dysmenorrhœa very severe, blood being expelled in clots. Latterly uterine colic with backache had become so severe that leeches had to be applied to hypogastrium, hypodermic injections of morphia and large doses of cannabis indica given by the mouth. She has had for years a constant leucorrhœal discharge. Dyspareunia severe, and during menstruation experienced troublesome dysuria. Bowels inactive; vomiting troublesome in the mornings for some years back during period. Constant pain, aggravated on pressure over left ovary, which would sometimes shoot up under ribs to shoulder of same side. On examination with finger, found slight enlargement of cervix, tender to touch, especially towards left side; the uterus floated perfectly free in pelvis, there being no indications of adhesion or displacement.

The view through the speculum showed a small, round os, slightly abraded on the inner edge, and giving exit to a long, stringy, glutinous-looking discharge, the result of chronic inflammation of the mucous membrane of cervix, implicating the villi and Nabothian glands situated in that structure. I failed to introduce the sound without the speculum, and even with its aid had a great deal of difficulty, on account of an exceedingly narrow, constricted internal os. As the sound passed through the constricted part, she cried out, "That is the sore spot," and seemed to suffer a good deal of pain. It registered three inches in depth, showed the slightest possible degree of ante-flexion, and caused a good deal of pain on being pressed against the fundus. On withdrawing the instrument a few drops of blood followed.

From the above I concluded my patient was suffering from old standing chronic inflammation of the lining membrane of the body and cervix uteri, more especially advanced in that part corresponding to the internal os, thus producing undue encroachment on that part of the canal. In this condition we find a cause of the severe obstructive dysmenorrhœa, characterized by violent uterine tenesmus during the menstrual period, relief from which she could only obtain by leeches, hot fomentations and anodynes. In passing, I will briefly allude to a remark Dr. Marion Sims makes use of. He says that "There can be no dysmenorrhœa,

properly speaking, unless there be some mechanical obstacle to the egress of the fluid at some point between the os internum and os externum." This statement Dr. Atthill points out as not being borne out by experience, and this seems evident here, as, after I had dilated the cervix, including the internal os, the pain still continued, and was aggravated by the passing of the sound. Also that the patient suffered from the same congestive pain before any discharge appeared, which could only have been due to distension of the inflamed uterine tissues with blood, acting upon the already morbidly sensitive nerves.

I looked upon this case as one suitable for the application of nitric acid, and, through request, Dr. R. P. Howard kindly saw the patient in consultation, when he advised the application first of iodine, carbolic acid, the warm douch, etc., before resorting to the more severe remedy. The os was thoroughly dilated with laminaria tents, and this treatment carried out for over a month without any benefit.

On the 22d February, 1876, I dilated the cervical canal well, and applied the strong nitric acid, after Dr. Atthill's plan, to the entire inside of uterus. The patient experienced no pain whatever, which I could not say for the iodine. From this time forward she had not a single bad symptom. Three weeks after the operation she left her bed. The next catamenial period did not take place until seven days after the time it should have appeared. It lasted three days, was normal in quantity, and did not cause the slightest uneasiness, much to her astonishment. Six months after operation I examined the patient and found a perfectly healthy condition of the parts. The os was quite free from that glary discharge before spoken of, and she considered herself perfectly well in every respect.

Mrs. F., aged 26; married about one year; has never been pregnant. This lady consulted me for the relief of severe attacks of menorrhagia, occurring regularly for the last eight months. Upon the last occasion the hemorrhage was so severe and alarming to the patient that I deemed it necessary to apply a styptic on lint to the os to arrest the bleeding. Her condition was now an exceedingly lamentable one. She became low spirited, was rapidly losing flesh, had an ex-sanguine look, and lived in con-

stant dread of her approaching monthly period. On explaining to her the nature of the operation I had in view, she at once consented. These attacks of hemorrhage would set in every three weeks, and sometimes oftener, and continued for seven or eight days. During the intervals a profuse leucorrhœal discharge was present. The pain accompanying these attacks was of a peculiar character. It would set in most violently each day at about twelve o'clock, and continue with agonizing violence for half an hour, and then disappear until the following day at the same hour. It was confined to the hypogastric region, radiating to each side, and accompanied by increased frequency of micturition. Dyspareunia severe. On examination, the os was found very painful to the touch, and had a rough, velvety feel. It was patulous, and larger than one would expect to find. The uterus was free and mobile in all directions, of normal size and position.

Through the speculum could be seen an extensive ulceration of the os of the granular variety, having the appearance of a bright red, irregular patch surrounding the orifice. This denuded surface bled easily on being touched with the sound, which instrument caused a great deal of pain in passing through the internal os. The fundus seemed to be free from disease. A large quantity of the characteristic mucus was issuing from the os; cervix much congested and œdematous. I looked upon this case as one of endocervicitis, with granular ulceration of os and areolar hyperplasia of cervix.

April 4th—I dilated cervical canal thoroughly, and the following day applied in the usual way the strong nitric acid to the whole of the interior of uterus. She did not experience the slightest sensation of pain. Kept her in bed and gave her a tonic of iron and quinine.

April 13th—Menstruated; discharge slight and entirely free from pain; lasted three days.

18th—Husband discarded my directions, and coitus quite upset her. Complained of severe pain over uterus and the left side, which occurred periodically for two days at noon, lasting probably half an hour. Ordered husband to take another room, and applied 20-grain solution of nitrate of silver with brush to os.

27th—Introduced speculum, found cervix of normal size; ulceration almost completely healed, and no pain or hemorrhage whatever

followed the introduction of the sound. Patient now left her bed, and I sent her away to the country for two months, keeping the husband in town.

This lady has never had any return of uterine trouble. Her periods are regular, painless, and discharge of normal quantity. The cause of the trouble here was, without doubt, excessive sexual intercourse in a woman naturally of a delicate constitution. In both of these cases I omitted to say that before removing the speculum at time of operation I applied a pledget of cotton wool, saturated in glycerine, against the os, which was removed at night by an attached string and replaced by a fresh one. This the patient continued to do herself for a week. This patient is now pregnant in her fourth month.

Mrs. M., aged 31; married ten years; has three children, youngest about three years of age; no miscarriage. She is stout, weighing about 160 lbs. Has always enjoyed good health until within the last six months. During this period she has suffered from back-ache, dragging pains about her hips, general languor, headache, and sometimes vomiting. She states that for the last three months her periods have been accompanied with the loss of a good deal more blood than usual, and for a month back it has assumed the form of metrorrhagia. This caused her some alarm, for which she now sought advice. On examination there was some tenderness of cervix and body of uterus. Through the speculum the os was seen to be patulous, and the surrounding lips denuded of epithelium of a dark livid color, painful and bleeding very easily on being touched. The cervix was congested and œdematous. The sound registered a depth of three inches. The fundus appeared very sensitive, and bled easily on being touched.

At the time of the examination her regular monthly period was about due, so I sent her away with a placebo to allow the period to pass over before applying the nitric acid. Ten days from this she returned to me, saying the discharge still continued, that she was no better, and that she would not live long in her present condition.

On the 24th of April, I introduced one of the largest size laminaria tents, and next morning I could introduce my index finger, but could

detect nothing save a highly granular condition of the lining membrane. I now cleaned out the cavity well with cotton wadding on Playfair's probes, and with the uterine speculum introduced, swabbed the whole uterine cavity, including the cervix, freely with nitric acid. Applied a pledget of cotton soaked in glycerine to os, and left her in bed quite comfortable. Next morning I found her a little feverish and complaining of pain over hypogastrium; pulse 100. Had a severe rigor before I arrived. Gave her a hypodermic injection of  $\frac{1}{2}$  gr. of morphia, applying a sinapism over uterus, to be followed by linseed poultices. Found her better that evening. Next morning still a little feverish, but not complaining much. Continued poultices, and gave her  $\frac{1}{4}$  gr. doses of morphia by mouth every four hours. Next morning very much worse; had another severe rigor; temperature,  $103^{\circ}$  F.; pulse, 110; flushed face and a good deal of tenderness over uterus; headache and vomiting rather freely, and great irritability of bladder. I now examined per vaginam for the first time since operation. The passage was intensely hot and dry. The uterus was felt low down in the pelvis, very tender, and fixed as if set in mortar. The roof of pelvis was as hard as a board. In the sac of Douglas was a hard, unyielding tumor pressing down upon the rectum, and pushing the uterus forward up against the pelvis and to the left side. Applied (10) ten leeches over uterus, followed by poultices, which gave her great relief. Morphia still continued, with addition of bismuth, as vomiting was becoming severe. Towards evening, I applied an unguent composed of blue ointment, extracts of belladonna and opium, spread on lint, to the hypogastrium; this was covered with the hot linseed poultices changed every three hours. Tympanites slight.

Next, or fifth day after operation, Dr. R. P. Howard kindly saw patient with me, and found, on examination, the same condition as above described. Agreeing with me in the diagnosis of a sharp attack of metroperitonitis, Dr. Howard advised morphia to be increased to  $\frac{1}{2}$  grain dose with 1 grain of calomel every four hours; other treatment continued as usual. She continued on in this way for the following ten days, her temperature ranging from  $103^{\circ}$  to  $104^{\circ}$  F.; pulse averaging about 120; very troublesome

irritability of bladder; tympanitis becoming extensive. Was kept thoroughly under influence of morphia whole time; diet, milk, beef tea and eggs chiefly. Used warm water vaginal injections twice daily. On the fourteenth day of disease she began to improve, tenderness abated, and there was a slight discharge from the vagina. I now lengthened the intervals between the morphia powders, and she continued to improve for the next two days.

On the seventeenth day she became worse, had a rigor, and old symptoms set in as violently as ever. Temperature ran up to  $105^{\circ}.2$ ; pulse 150; pain now so severe patient would draw her legs up and scream most violently. I remained with her for one and a half hours, during which I gave her three hypodermic injections of morphia— $\frac{1}{4}$  grain each—before she experienced any relief; powders, etc., continued. She now continued to get much worse from this out, and appeared apparently failing fast though quite conscious of all that was taking place. Tympanites enormous; passed a tube into rectum but could not get past exudation tumor to communicate with flatus in colon; made up her mind she was going to die, and refused food.

Nineteenth day pulse became a mere flicker, such as would make an almost straight line in a sphygmographic tracing; prostration complete; conjunctiva almost insensible to touch; pupils widely dilated; involuntary discharge from bowels of offensive black fluid. Did not think she would live till morning, so I left, with directions to continue giving her brandy and beef tea, when possible, in very small quantities.

Twentieth day—Was surprised to find patient better. Pulse 110; temperature  $101^{\circ}$  F. No pain, slight tenderness; tympanites completely disappeared. From this day she continued to improve.

On the twenty-second day I applied an Emp. Lyttæ over uterus. The exudation now began to become absorbed, but it was months before she was well enough to leave the house. The uterus is now movable but firmly anteflexed, and retained in that position by adhesions to surrounding parts.

*Application of Nitric Acid to the Uterine Cavity.*

By FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P., London; Professor of Physiology, University of Bishop's College, Montreal.

Read before the Medico-Chirurgical Society of Montreal, April 13, 1877.

On the 5th November, 1875, I read before this Society a paper detailing two cases of Placenta Prævia. One case was a Mrs. B., who is also the subject of my present remarks. The attack of Placenta Prævia occurred in December, 1872. In the autumn of 1873, she became pregnant, and aborted about the fourth month, viz., in January, 1874, leaving her in a very anemic condition. She was under my care for several months, during which time her menstruation was very irregular and most profuse. Sometimes she would go a fortnight; occasionally three weeks. Under a course of ferruginous tonics, she improved much in general health, and in the regularity of her monthly periods, although the quantity continued in excess of what was normal. In the summer of 1874, I ordered her to the country, and did not see anything of her till December of the same year, on my return from Europe. I was then asked to meet in consultation a medical friend who had been attending her during my absence. The menorrhagia had returned, and was most profuse. The physician in attendance assured me he did not think her pregnant, and the lady herself asserted she was not, adding *it was utterly impossible that she should be so*. This emphatic declaration put me off my guard, and as most of the ordinary remedies—internal and as injections, had been used without success, I suggested the injection of the interior of the uterus with a solution of the perchloride of iron in glycerine, of the strength of one to twenty. This being agreed upon, I undertook its performance, and for the purpose passed a large sized gum elastic catheter through the cervix—the patient lying on her back with hips elevated, and the vagina well oiled. The solution was sent through the catheter by means of an ordinary glass syringe; about two ounces was thus thrown in, but I did not feel that I had satisfactorily performed the duty I had undertaken. I cannot exactly explain why this idea took possession of me, beyond the fact that I thought the injection came too rapidly out of the vagina to have passed

through the uterus. This was on the 18th of December. On the 21st December, the patient not having improved any, I again repeated the operation, and this time I was satisfied I had done so effectually, and the sequel proved I was correct, for, on the morning of the 22nd, I was hurriedly sent for, and, on my arrival, found a three months fœtus, lying on the bed. She had lost considerable blood, and was extremely weak, so much in fact, that I deemed it advisable to administer stimulants.

January 5, 1875. Patient has so far made but little progress; there has been several slight hæmorrhages. Was called at two, this a.m., the flow having increased as to be very alarming. Gave ergot *fid. ext.* 3i every fifteen minutes for three doses, with cold over uterus. The flow being controlled, I ordered the ergot to be given in the same dose every two hours, till I saw her again.

January 11th.—Flow has never been severe since the 5th instant, but there has been an almost constant discharge. Ordered *tinct. ferri mur.*, with ergot three times a day; also, a pill of acetate of lead and opium, three times a day.

January 22nd.—Called again this morning at one o'clock. Patient flooding greatly; but again I controlled it with ergot and cold. At eleven, a.m., Dr. Reddy saw patient in consultation. Examined her with speculum, and the os was found large, swollen and congested. Body of the uterus considerably enlarged. Diagnosis sub-involution of uterus. Dr. Reddy suggested the application to the interior of the uterus of Savage's solution of the tincture of iodine and iodide of potassium. Also to have iron and quinine.

January 25th.—To-day took out a sponge tent, which was introduced the day before—a previous one not having dilated the os sufficiently. Applied Savage's solution to interior of uterus, by means of a kind of sponge probang. The application was not satisfactory, owing to a quantity of the solution being squeezed off, while passing through the cervix.

January 26th.—To-day, obtained from my friend Dr. Wilkins, a small glass tube, about one-eighth inch diameter, with angle so arranged as to pass into the cervix with ease. Through this tube, to-day, applied Savage's solution, by means of a large camel's hair pencil. The application was made very satisfactorily.

February 4.—Have made several applications of Savage's solution, but, so far, there has not been any apparent benefit, and I have had much difficulty in keeping the os open. Have had to introduce two or three additional sponge tents. Patient is losing ground and is becoming melancholic. Almost refuses to allow further examination.

February 7.—Was again called during the night; the flow being very great. This time it was difficult to control. The ergot did not seem to act; and I was obliged to introduce ice into the vagina, before any benefit ensued. Lombe Athill's treatment of menorrhagia by the application of fuming nitric acid to the interior of the uterus, having been somewhat recently tried by several in Montreal, although not in every case with results such as would be desired, I came to the conclusion that the apparently almost desperate condition in which my patient was, justified my using it. I accordingly determined to wait two or three days, so that some little additional strength might be gathered.

February 10.—On examination to-day, found the os so closed as not to allow the introduction of the glass tube already alluded to. I accordingly passed in a large sponge tent, and made my preparations to apply the acid next day. Patient has rallied a little, but there has been daily hæmorrhage.

February 11.—Withdrew the sponge tent, and passed through the cervix the glass tube already alluded to. I had previously prepared four of the long wires belonging to my endoscope, with cotton wadding. Two of these I used to thoroughly swab out the uterus. I then applied the remaining two, steeped in fuming nitric acid, to the cavity of the uterus. The application of the first one caused no pain whatever; the application of the second one did cause some little pain, but not to any great extent.

9 p.m.—No pain; temperature normal; pulse 72. Not a drop of blood has been lost since the application of the acid, and patient is as well as could be desired.

February 12.—Patient passed a very comfortable night and is doing splendidly. No hæmorrhage whatever.

February 13th.—Early this morning a clot, somewhat larger than a large walnut, very dark and dense, was passed. It caused some pain, not unlike labor pain, for a couple of hours be-

fore it came away. I need not detail this case further. The recovery was complete. The patient rapidly gained strength, and in about three weeks menstruation set in. It was normal in quantity, and only lasted three days. From that time till the present, the patient has continued in excellent health, gained flesh, and has menstruated regularly and in just sufficient quantity.

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## Correspondence.

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*To the Editor of the Canada Medical Record.*

As one of the medical practitioners of this city, I was rejoicing over the fact that Dr. Hingston was leaving the civic chair, after having with much labor established a board of health such as the requirements of the city long demanded.

You may judge, Mr. Editor, of the astonishment with which I read the present Mayor's remarks, all the more insulting and senseless, considering he had never made any enquiries as to what work had been done or to what its duties were in the future. No one but can recollect his objections to the City Fire-alarm Telegraph.

From my own experience of the last few years, there never was a greater necessity for a board of health than exists at the present time, and it is to be hoped that the citizens of Montreal will give an expression of opinion sufficiently emphatic to shew Messrs. Beaudry and Thibault that their recent action will not pass unchallenged.

Tenants and landlords in most cases have to be *forced* to attend to the sanitary condition of their houses, and it is only by means of a properly constituted board of health such a thing can be accomplished.

MEDICUS.

April 10th, 1877.

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### TREATMENT OF VESCAL HEMORRHAGE.

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The general treatment must be based upon the cause of the hæmorrhage, but the bleeding itself should be checked by the application of an ice-bag over the bladder and perineum, the internal administration of astringents (alum, tannin), or the injection, as advised by Lebert, of a 3.5 per cent. solution of tannin into the bladder. Lallemand has cauterized the bladder.



In case of the formation of coagula, the bladder must be emptied be means of the catheter. KRAUS—*Diagnose und Therapie der Krankheiten des Menschen.*

## Progress of Medical Science.

### ON THE MODERN NEGLECT OF CALOMEL IN CERTAIN DISORDERS.

By DR. DYCE DUCKWORTH, Assistant-Physician to St. Bartholomew's Hospital, &c.

What I now desire to call attention to is the neglect of mercurial medication in many so-called "functional" derangements of the body. And, as being uppermost in my thoughts, I mention first, as an instance which calls for this treatment, cases of acute gastric catarrh, the condition described by French Writers as *embarras gastrique*, and but too well-known in all ranks of English life as "biliousness." As an accompaniment of many constitutional ailments, of acute inflammations, the continued fevers, the exanthemata and rheumatic fever, it is commonly enough met with, while as a result of intemperance in food and strong liquors it is even more familiarly known. But the frequency of its occurrence in children, not always as a result of over-eating, but often ensuing, I believe, upon check to the functions of the skin from improper exposure and insufficient clothing, is not fully appreciated. In these cases there is sometimes a remarkable degree of pyrexia present at some periods of the day, and several *pseudoprodromata* of enteric fever may be noted. Indeed this catarrhal fever really constitutes a large part of the early trouble in many cases of the latter disorder. The same condition is likewise very common during active periods of dentition, when the catarrh is often more distinctly appreciable as a flux from the nasal or bronchial membranes, and may be, and often is, mistaken for the ordinary effects of cold.

In this catarrhal condition, it was formerly, much more than now, the practice to employ either emetics or a mercurial purge. The former have almost entirely gone out of fashion, and I imagine it will be difficult to reintroduce this plan of treatment, despite Dr. Burton's recent plea for it in this journal; but the use of mercurial preparations is free from objection so far as treatment *jucunde* is concerned. Strong prejudice is met with sometimes amongst classes of patients who can desery the word "*hydrargyrum*" in their prescriptions, and its presence is held to savour somewhat of violent and effete practice, and of unwarrantable undermining of the constitution.

It is in response to some such feeling and objections as these that many practitioners hailed with satisfaction the advent of such a drug as podophyllin, which gained for itself, somewhat unwarrantably, as I believe, the name of

"vegetable mercury." This drug, which is uncertain in action and often productive of griping, even when guarded with henbane and given with other aperients, generally requires to be repeated, and in this way time is lost, and the results are often far from being so beneficial as those which follow the action of a grain or two of calomel.

Let it be noted in passing that many of the popular so-called "antibilious" pills notoriously contain mercury as an ingredient, notwithstanding impudent statements to the contrary on the pill-box labels.

It cannot, I think, be doubted that calomel, either alone or in combination with jalap, colocynth, or scammony, constitutes one of the most certain and efficacious purgatives, clearing the entire portal system, producing a large flow of bile in the motions (though not manifestly acting as a strict cholagogue from the liver), and affording a measure of relief to the body-unattainable by any other means.

To secure this result is a leading principle in the conduct of the catarrhal state above described. And besides this condition, I would adduce the cases of acute gout and of gouty dyspepsia, which are eminently well treated by calomel, at the outset; so, too, many of the recurring congestive troubles of chronic cardiac and pulmonary disease are amenable to the same medication, care being taken to withhold the drug in cases where there is manifest renal degeneration, since, as is well known, mercury is ill borne under these circumstances, and may be mischievous.

Undesirable results would follow if mercury was frequently given in such cases as I have enumerated; but I only allude to the practice of employing it at the outset, and then it should be given boldly in doses of from one to five grains over night, once for all. In adults a draught may be given on the following morning, containing any suitable saline aperient, such as sulphate of magnesia or Carlsbad salt. This plan leads the way to a simpler or more specific course of treatment in any given case. I am satisfied that in many minor disorders of children nothing can take the place of calomel as a purgative, and much time is often lost by beginning with drugs that are accounted more simple. The only medicine that appears to me to approach calomel in value is castor oil; but this is constantly a source of trouble from its disgusting character.

I find that calomel is distinctly preferable to grey powder as a purgative, just as for other purposes strychnia is to milder preparations of nux vomica. Its action is smarter and more decided. It has also the great merits of being tasteless, and of exciting no nausea, and its bulk is small.

In strumous children, or in healthy ones who suffer occasionally from gastric catarrh, with

tenderness and some timidity of the liver, no medicine is comparable to a purgative containing calomel. After its action a copious bilious stool or two are passed, the tongue is observed to become cleaner, the feverishness pertaining to this state subsides, and the child becomes brighter, and has restored appetite. A so-called simpler treatment with soda or citrate of potash will often fail to yield these results, and so too will repeated doses of rhubarb and senna. The constant failure of "nursery remedies" in these cases must have forced itself upon the minds of most practitioners, and, truly, by the time medical advice is sought the time for the administration of calomel has fully arrived.

I shall not dilate further upon the virtues of this drug in connection with gastric disorders, but may mention that calomel is sometimes of value in cases of chronic catarrh, when given as in an acute case, and in cases of peritonitis with severe vomiting, small doses appear to exert some sedative action upon the intestinal tract.

I would not be understood to urge a return to the old custom of a large and frequent dosing with calomel. Nothing could be worse. All drugging is an evil; but when medicine is distinctly indicated we should not fear to use active agents boldly, and so as to produce their effects.

Many hard things have been said about the improper use of mercury, but instances are not far to seek in the practice of most experienced men where aperient mercurial medicine has been taken almost nightly for years without its being possible in common honesty to say that any serious harm had thereby accrued to the individual. The habit is of course a very bad one, but it may be easily broken. In one case I succeeded by giving bread pills, and in due time declared the fraud to the patient, who had henceforth full confidence in his peristaltic powers.

I venture then to close these remarks with a repetition of the statement I made at the outset, viz., that calomel appears to me to have fallen into unmerited disuse in many disorders, and I desire to put in a plea for the restoration of this drug to a larger sphere of operation, and I am confident that such practice will not only be for the benefit of sufferers, but also for the increased credit of medical art.—*Practitioner*, July, 1876, p. 1.

#### ON GRANULAR OPHTHALMIA.

By C. HIGGINS, Esq., Assistant Ophthalmic Surgeon to Guy's Hospital.

*Granular Ophthalmia* affects principally the lower classes, and is often very prevalent where large numbers of persons are crowded together in workhouses, schools, barracks, &c. The causes of the disease are not altogether plain, but it would appear that in persons who have lived for some considerable time under unfavorable

hygienic conditions, a peculiar granular state of the palpebral conjunctiva becomes developed. Persons thus affected are said to be predisposed to granular ophthalmia. The predisposed eyelid is characterised by the existence of small, pale, more or less spherical bodies, situated in the structure of the conjunctiva; these little bodies much resemble, and are known as, sago grains. They will be found best developed and most constantly present on the inner surface of the lower lid, near the outer canthus. They may, however, be scattered over the whole surface of both the lower and upper lids, but are always most abundant in the position indicated.

[The disease is most obstinate, but in many cases will yield at length to treatment, no signs of its previous existence remaining behind.]

The remedies which have been found most useful are astringents and mild caustics. Strong caustics should never be employed: it is easy to get rid of the granulations by their use, but the conjunctiva is also destroyed, and is replaced by dense cicatricial tissue, which by its contraction causes the shrinking of the conjunctiva and other evils. The worst examples of entropion, symblepharon, narrowing of the palpebral aperture, &c., that have come under my notice (with the exception of those caused by burns), have been in old cases of granular ophthalmia, which had been treated by solid nitrate of silver. The treatment of granular ophthalmia adopted amongst our out-patients is as follows:—In the more recent cases the palpebral conjunctiva is twice a week touched lightly all over with the mitigated nitrate of silver stick (one part of nitrate of silver to three of nitrate of potash); after the application the conjunctiva is washed with a solution of salt and water. In the more chronic cases the greenstone (*lapis divinus*) is used instead of the nitrate of silver.

In most cases sulphate of copper drops (*cupri sulph., gr. iij, aquæ ʒj*) are ordered to be dropped into the eyes three times a day, or oftener. If there be much intolerance of light, or symptoms of iritis exist, *gr. ʒ* or *gr. j.* of sulphate of atropine is added to each ounce of the sulphate of copper drops.

If there be copious purulent discharge, alum lotion (*gr. x. to ʒj*) is ordered in lieu of the sulphate of copper drops.

If extensive ulceration of the cornea exist, the eye is ordered to be kept bandaged with lint soaked in belladonna lotion, and a fomentation of belladonna, or poppies, to be used at intervals; the granulations are neglected until the more severe symptoms have subsided.

In some severe cases inoculation with pus from a case of purulent ophthalmia is performed, but such cases are always treated as in-patients.

Inoculation is only applicable to cases in which there is dense pannus; if the cornea be

healthy, or only slightly affected, it is very liable to slough during the course of the induced purulent ophthalmia.

Inoculation is best performed by simply transferring some of the pus from a recent case of ophthalmia neonatorum to the conjunctiva of the person whom it is desired to inoculate. Purulent ophthalmia usually sets in in the course of twenty-four or thirty-six hours, and may be left to run its course without treatment. The granulations always disappear, and the cornea clears gradually, improvement often going on for three or four years after inoculation has been practised. If it is deemed advisable to inoculate in a case where one eye is healthy, the greatest care must be taken to shield the sound from contact of discharge.

The treatment of granular ophthalmia, especially amongst hospital out-patients, is most unsatisfactory. Some cases are permanently cured, many get better and then cease to attend, returning in a few weeks or months as bad as ever; others again continue under treatment for months and years; all our efforts only serving to keep the disease in check. Even this, however, is doing a good deal, for such cases without treatment, or if treated improperly, will go on from bad to worse, and eventually lose all useful vision; we must, therefore, persevere with our treatment, in spite of the want of success attending it. In some cases I have seen a cure effected after two or three years or more of constant treatment; a favorable change takes place almost suddenly, the granulations begin to disappear, and are replaced by smooth shining tissue, which can hardly be looked upon as healthy conjunctiva, but nevertheless forms a very efficient substitute. The following case is a good instance of such a recovery:—

A soldier, who had contracted granular ophthalmia in India, some years before, came under my care in 1870, at the Central London Ophthalmic Hospital. He had been treated off and on during the whole time that his eyes had been affected, and with the exception of inoculation had had almost every known remedy tried. When I first saw him the palpebral conjunctiva, especially that lining the upper lids, was infiltrated, swollen, and covered with large rough vascular granulations, consisting principally of masses of hypertrophied papillæ, separated by deep sulci; both corneæ were covered by dense pannus; he could hardly see to go about.

I treated him for about three years without apparent result; but at the end of that time a change took place, the granulations rapidly disappeared, the swelling and vascularity subsided, the pannus gradually wore away, and at the end of a comparatively short time all that was left of the disease was some scarring of the surface of the lids, slight shallowing of the sulcus between the lids and globe, and slight opacity of the cornea.

During the time this patient was under my care he was treated with every kind of astringent lotion,—applications of greenstone, mitigated nitrate of silver stick, solutions of the salt of strengths varying from ten to forty grains to the ounce of water, dusting of calomel and quinine into the eyes, constant poultices; in short, everything was tried except inoculation.

At the time recovery commenced he was having a solution gr. xx. to ʒj. of nitrate of silver applied daily, which treatment was continued until all trace of granulations had disappeared.

The treatment of the sequelæ of granular ophthalmia is entirely operative, and would take too much space to be entered into here; suffice it to say that our object must be to protect the cornea, when exposed, and to guard it from irritation by the removal of foreign bodies, cure of entropion, &c. And in cases where a permanent opacity has formed in front of the pupil a new one must be made behind a transparent portion of cornea.—*Guy's Hospital Reports*, 1876, p. 180

#### ON PURULENT OPHTHALMIA.

By C. HIGGINS, Esq., Assistant Ophthalmic Surgeon to Guy's Hospital.

Purulent ophthalmia, more especially that form of the disease met with in newly born children (ophthalmia neonatorum), is a very frequent cause of loss of sight.

Amongst hospital out-patients we often see children in whom the positions of the corneæ are occupied by dead white globular staphylomata, vision being reduced to perception of light. This condition is usually brought about by destruction of the corneæ from extensive ulceration or wholesale sloughing during the course of purulent ophthalmia. The projection (or staphyloma) is formed by the iris, which has pressed forward into the opening left by destruction of the cornea, subsequently become coated with lymph, and at length formed a more or less dense cicatrix.

I have no hesitation in saying that this state of things might in many cases be prevented. Besides the extreme cases just mentioned, we may find vision impaired by corneal opacities, opacities on the lens capsule, corneal opacity with anterior synechia, or small staphylomata, all arising from the same cause; these, however, are not so important, as the loss of sight is only partial, and very good vision may be obtained by operation.

The causes of ophthalmia neonatorum are, contact of acrid vaginal secretions during parturition, want of cleanliness after birth, or a combination of the two, assisted by bad air and bad living. The secretion of all others most certain to cause purulent ophthalmia, and that in its severest form, is gonorrhœal matter; but leucorrhœal discharge, or even the irritation of

dust and dirt after birth, without contact of abnormal secretion, may cause the disease.

I may here correct what appears to be a very common error, viz., to suppose that all purulent ophthalmia is caused by contact of gonorrhœal matter. Such is not the case, and by far the greater number of cases arising either in the newly-born or in older persons owe their origin to other causes. Gonorrhœal ophthalmia is purulent, but purulent ophthalmia is not necessarily gonorrhœal.

The symptoms of ophthalmia neonatorum are obvious enough; the lids are swollen, dusky red in colour, and there is copious yellow discharge issuing from between them, which may escape in gushes on an attempt being made to open the eyes. As previously stated, the great danger to sight is from ulceration or sloughing of the cornea, either of which—if proper treatment be early adopted—should occur but rarely. In many cases the disastrous results of ophthalmia neonatorum are due to neglect on the part of the nurses or mothers, who take no particular notice of the state of the child's eyes until the discharge has become very profuse. Advice is then sought, and very probably the cornea is found opaque, deeply ulcerated, sloughing or suppurating, or very possibly perforation may have already taken place. Occasionally part of the contents of the globe have escaped; it has happened to me on two occasions to have the crystalline lens brought in a piece of paper, with the report that the nurse thought the sight had come out.

In other cases again, the medical attendant is to blame; his attention is called to the condition of the infant's eyes, but he looks upon it as a trivial matter, prescribes warm water, and perhaps does not see the child again for two or three days; by this time, however, there is no mistaking the nature of the disease, and very probably permanent damage has been done to the cornea.

Again, when the nature of the disease has been indicated, and a plan of treatment prescribed, the attendants cannot be persuaded to carry it out thoroughly, and the child is allowed to go blind simply from wilful neglect on the part of its nurse or mother.

In some cases, however, the inflammation is so violent from the first that damage will be done to the cornea in spite of treatment early commenced and carefully carried out; but such severe examples are rarely met with.

It may appear at first sight that in such an active and violent inflammation as purulent ophthalmia (especially the gonorrhœal form) depletory measures should be adopted. Experience however shows that the opposite course should be taken.

I have yet to meet with a case in which I would have recourse to general bloodletting, purgatives, antimonials, &c. Patients who are

naturally strong and healthy, when they seek advice and treatment for severe purulent ophthalmia, are as a rule too much depressed to bear anything of the sort. I occasionally order a few leeches to the temples in very violent cases, especially if pain be a prominent symptom, but never do more in the way of depletion.

The objects we have to keep in view in the treatment of this disease are to check the inflammation, and at the same time to guard most jealously the vitality of the cornea; we should therefore avoid all remedies calculated to lower the patient's powers, and employ those which have an opposite tendency.

In mild cases of purulent ophthalmia the frequent use of alum or other astringent lotion will suffice for a cure. The lotion should be used as frequently as may be necessary to keep the eyes free from discharge—every two hours, hourly, or oftener according to circumstances; care must be taken to apply the lotion to the conjunctiva and not simply to the skin of the lids and face.

Some simple ointment should be applied at night to the edges of the eyelids and skin of the cheek, to prevent the former from sticking together during sleep, and the latter from becoming excoriated.

In the more severe cases a much more energetic plan of treatment must be followed.

The plan I adopt is as follows:—When the patient first applies, the conjunctiva, both palpebral and ocular, is cauterised thoroughly with solid nitrate of silver, then washed with salt and water; the eye is then lightly covered with a piece of wet lint, fixed to the forehead with a turn of bandage, and allowed to hang over the eye.

The patient (if treated as an out-patient) is directed to sit at home and constantly bathe the eye with alum lotion (gr. x to ʒj).

Some simple ointment is ordered to be applied to the lids and cheek. If there is much pain three or four leeches are ordered to be applied to the temples.

Quinine or iron, or both, are prescribed, and the patient directed to live well and take a fair amount of stimulant; if sleep is impossible, opium is given at night.

Should the cornea be damaged the eye is kept bound up with a pad of lint soaked in belladonna lotion and a bandage, which are removed and the alum lotion applied as often as discharge collects.

The patient is seen in two days, and if not improved the nitrate of silver is again applied; if improvement have taken place the patient is ordered to go on with the alum lotion and medicine, and the nitrate of silver is omitted.

In all cases where one eye alone is affected the sound one is carefully shielded with pad and bandage, and the patient directed to sleep on

the affected side, so as not to allow the discharge to run over to the sound eye.

The treatment is perseveringly carried out until manifest improvement has taken place, when the lotion may be used less frequently; but its use must not be entirely discontinued until all discharge has disappeared.

In cases where corneal damage has taken place the eye is kept firmly bandaged until cicatrisation is complete.—*Guy's Hospital Reports*, 1876, p. 190.

**PRACTICAL OBSERVATIONS ON OPHTHALMIA NEONATORUM. BURNS. A SIMPLE PROCESS BY WHICH MOTES AND OTHER FOREIGN BODIES MAY BE REMOVED FROM THE EYE.**

By L. A. DUGAS, M.D., LL.D.,

Professor of Surgery in the Medical College of Georgia.

**OPHTHALMIA NEONATORUM,**

or the purulent ophthalmia of new-born infants, is so common, and so often followed by blindness more or less complete, that any plan of treatment calculated to diminish its destructive tendency cannot be otherwise than eminently worthy of publication. I have been long in the habit of relying entirely upon the antipyrogenic properties of the chloride of soda, known as Labarraque solution, and find that the French article is much better than that manufactured in our country. The printed directions which accompany the French solution are calculated to mislead one disposed to use it as an antipyrogenic, inasmuch as they are designed for its use as an antiseptic, which requires a much stronger solution. From a very large use of it, I am prepared to say that for lessening suppuration and healing ulcerated surfaces, a solution of half an ounce of French chloride of soda in a quart of water will be generally found to be of the right strength. If the American chloride of soda be used it will usually require fifty per cent. more.

For the treatment of ophthalmia neonatorum, you may rely upon this solution exclusively. Let the eyelids be separated as much as possible without violence, and pour upon the eye a stream of the solution sufficiently bold to wash away all purulent matter thoroughly. In winter this ablation must be made tepid. The eye, or eyes, as the case may be, should then be covered with a doubled bit of linen about the size of a dollar coin, and kept wet with the solution. Every three or four hours the eyelids should again be separated and the ablation freely repeated until the suppuration and inflammatory condition have entirely ceased, which will usually require a week.

This treatment has been uniformly successful in my practice when called in sufficiently early; leaving no blemish nor defect of vision.

When the tumefaction of the lids is such as to prevent their separation, the lotion should be used with a glass syringe inserted at or near the external canthus.

I have found Labarraque's solution to be the best remedy I have ever tried for

**BURNS.**

I believe that its great value in the treatment of these accidents was first pointed out by Lisfranc, very soon after its admission into the *Materia Medica*. It possesses the rare virtues in such cases of immediately arresting all pain, and also of preventing suppuration when the whole thickness of the skin has not been destroyed. From half an ounce to one ounce to a quart of water will be usually of the proper strength, and the affected surface should be covered with old linen, which is to be kept wet with it, and not to be removed for 24 or 48 hours, according to circumstances, as it is important to avoid tearing away the cuticle. In cold weather, and when the burn involves a large surface, so as to render wet applications objectionable, I am in the habit of mixing the chloride with linseed oil in the proportion of  $\frac{1}{2}$  oz. or 1 oz. to 8. oz. of oil, and using this in lieu of the aqueous mixture above described. As a guide in regulating the strength of either of these prescriptions, I will observe that whenever the application gives pain instead of relief it is too strong, and should therefore be weakened.

As an illustration of the effects of this remedy, I will cite a case which came under my observation many years ago. I was requested to go in haste to see a child about two years of age, who had plunged his hand in a pot of boiling soup for the purpose of taking out some of the floating vegetables. I found the child in his mother's lap, screaming with pain, while his hand was being held in a basin of water. I had provided myself with an ounce of Labarraque's solution, which I immediately emptied into the basin. This was no sooner done than the child ceased crying, and was asleep before I could procure the bandages necessary to dress it. The cuticle was loosened over the entire hand up to the wrist, so as to make it difficult to save it. This was, however, done by first wrapping each finger with a roller bandage loosely applied, and then by doing the same for the remainder of the hand. This was all done without awakening the child: and the mother was requested to keep the dressings wet night and day for 48 hours. The child suffered no more pain, and at the end of the two days, on removing the dressing, we had the satisfaction of finding the cuticle still entire without a vestige of suppuration. The child was well in three days. Cases involving a deeper destruction of tissue would of course require more time.

**A SIMPLE PROCESS BY WHICH MOTES OR OTHER FOREIGN BODIES MAY BE REMOVED FROM THE EYE.**

The removal of motes or fragments of foreign bodies from the external surface of the eye is an operation we are frequently called upon to perform. Railroad employees and travellers, workers in metals, and stonecutters, are those most frequently claiming our services. The natural sensitiveness of the external eye is usually very much increased when we are consulted, so that the intolerance of light makes it difficult to examine the eye thoroughly.



With a little careful manipulation, however, we may succeed in finding the foreign body upon the cornea, the ocular conjunctiva, or beneath the eyelids. Wherever found, it is more or less difficult to remove by the procedures usually recommended by written authorities, and which you know, according to them, consists simply in its removal by means of one or other form of instrument while the eyelids are held open. No directions are given for the purpose of rendering the eye motionless during the operation; and yet it is extremely difficult for the surgeon, as well as painful to the patient, to dislodge the foreign body while the eye is instinctively avoiding every approach of the instrument. In order to surmount this difficulty, I have for many years been in the habit of placing the end of my index finger upon the eye just within the canthus, and retaining it there until I have removed the object. The contact of the finger produces a sensation which, while not decidedly painful, is yet sufficiently decided to engross the attention of the patient, and to prevent his moving the eye at the approach of the instrument or on its contact with the ocular surface.

By this plan the foreign bodies may be removed from the surface of the eye as readily as from any other part, and without the risk of scratching or otherwise injuring the organ, by repeated and unsuccessful attempts to take it by surprise, if I may use the expression, by sudden thrusts of the instrument used for the purpose. I am in the habit of using Scarpa's cataract needle, and find it better adapted to the purpose than any other instrument, whether the mote be imbedded or in simple contact.

A young man, accompanied by his father, came from one of our upper counties to get me to remove a thorn sticking in his cornea. It seems that he was walking in the garden and passing by a rose vine, when a branch coming in contact with his eye, one of the thorns plunged into the cornea and was left there by the onward movement of the young man. He applied to the physicians of the neighborhood, one after another, who made unsuccessful attempts to remove it with pocket knives, bistouries, lancets, etc. When he arrived here, I found him badly scarred and very despondent. By putting the end of my finger upon the eyeball so as to keep it quiet, the thorn was at once removed without any difficulty whatever. I may add that the delighted father exclaimed: "How strange it is that no one else thought of this simple method of proceeding!"

I am not prepared to say that no one else has ever resorted to this method, but I have not seen it recommended in print, although I have been teaching its advantages very many years to the classes of the Medical College of Georgia. It is more than probable, however, that other surgeons have used it, and, like myself, omitted to publish their experience—*New Orleans Medical and Surgical Journal*.

in speaking of the employment of large doses of ergot in the treatment of uterine fibroids, stated that he had given half-ounce doses of Squibb's fluid extract three times a day for more than a year without producing any injurious effects. When the pain caused by the uterine contractions became too severe, the drug was discontinued until the pain subsided.

#### PODOPHYLLIN IN THE TREATMENT OF HABITUAL CONSTIPATION—PODOPHYLLIN IN THE TREATMENT OF HEMORRHOIDS.

The *Gazette des Hopitaux* has just published a work by Dr. Rousselet on the treatment of habitual constipation by podophyllin, which corroborates the monograph of M. Marchant, published by us in 1874. And in the next issue the same journal informs us of a new application of this remedy, namely, in the treatment of hemorrhoids. On the first subject, which has already been discussed at length, we shall only give a few details; but as the second is new we publish it entire.

Dr. Rousselet states that in commencing his experiments he met with only tolerable success, as he had at command no trustworthy preparation of the drug; but that since he has used the pills found at the pharmacie's, known as the "pillules de podophylli," he has had the most satisfactory results.

However, the mode of administration which he has adopted appears to him to be an important factor in the forty-seven successful cases which he has recorded.

He insists, above all, that generally the patient is not subjected to the treatment for a sufficiently long period. He estimates that the time occupied should vary from two to six months, according to the duration of the constipation, in order that the patient may acquire regular and durable habits; and again it is necessary that the patient should go to the *garde robe* at the same hour every day.

He commences the treatment by the administration of a pill of one centigramme, augmenting the dose by one pill until the effect is produced, and gives the dose thus ascertained daily during fifteen days. Then he gives it only every other day; one week afterward every three days; in this manner prolonging the interval between the doses one day each succeeding week.

He prefers to administer the drug at the beginning of the last meal which is taken before retiring, and advises that the patients should contract the habit of visiting the *garde robe* immediately after breakfast.

The following is the article of Dr. Rivière on the employment of podophyllin in cases of hemorrhoids:

"The *Gazette des Hopitaux* of December 16 contains a paper by Dr. Rousselet on the treat-

At the meeting of the American Gynecological Society, Dr. Drysdale, of Philadelphia,



ment of constipation, by means of podophyllin, to which I heartily subscribe, since I have convinced myself of the efficacy of a well-directed treatment with this drug in such cases as he describes. But I am astonished to have nowhere seen attention called to another indication for podophyllin, which appears to me to be just as well justified—I mean its action on hemorrhoids. I have already made fifteen most conclusive observations, and since the attention of physicians has not been called to this point, I think it useful to say a few words on the subject.

"Among the constipated persons to whom I applied the podophyllin treatment, several had hemorrhoids which I attributed to their habitual constipation—that is to say, to the condition of venous engorgement which was its natural consequence.

"That these patients should recover from their hemorrhoids when the cause was removed was not surprising; but I asked myself is it not possible that the same result may be produced by the drug in persons who are not habitually constipated? It appeared to me that in producing softened stools by a drug which never produces engorgement of the hemorrhoidal vessels I would accomplish at least one good effect. And I myself was the first patient which I subjected to the treatment. The success was beyond my anticipations. Suffering from hemorrhoids, I took a *pillule de podophylli* of one centigramme, and by the next day was entirely relieved. On the recurrence of the hemorrhoids I always obtain the same relief from a dose of the podophyllin, taking one or two centigrammes, so as to simply soften the fecal mass.

"I will not affirm, however, that this is the mode of action of podophyllin; for, encouraged by success, I commenced to administer podophyllin not only in cases where the hemorrhoids were a passing accident of little gravity, but also to individuals suffering from permanent hemorrhoids, which should sooner or later call for radical treatment. These cases are not rare, for the sufferers postpone as long as possible an operation which is not only painful, but which involves some danger as well, and in the meantime their life is almost a burden.

"In these cases the administration of podophyllin produces an almost immediate relief from pain, and a considerable diminution of the swollen veins. It is necessary to keep up the effect of the drug, however, by daily doses, although I have seen several cases in which its use was abandoned after a month or two, without a return of the painful symptoms."—*Le Moniteur Theurap.—Le Mouvement Med. J. L. A.*

Dr. John E. Lockbridge, of Indianapolis, (*American Practitioner*), gives a remedy for

headache. He says: "Having observed that bromide of potassium, in twenty or thirty grain doses, and tincture of aconite root, separately, relieved more cases than any remedies I had previously exhibited, I experimented with large doses of the drugs combined. For several years I have been in the habit of giving in these cases sixty grains of the bromide of potassium and ten drops of the tincture of aconite root in a wineglassful of water, the same to be repeated in an hour or two if the head be not relieved; but a repetition of the dose is very seldom required. In the case of ladies and others who wish to have a remedy always at hand, or who are about to start on a journey, I supply them with the following mixture:—

"R. Bromide of potassium..... ʒ ij.  
Tincture of aconite root..... ʒ i.  
Distilled water, } ..... aa ʒ ij.  
Simple syrup, }

"M. S.—Take a dessertspoonful in some water every hour until relieved."

My recipe may smack of empiricism in appearing as a panacea for every variety of headache, let the cause be what it may and the accompanying symptoms what they will; but I am willing for it to rest under the soft impeachment, if indeed it relieves promptly only a moiety of these distressing cases. I will not now attempt to give the *rationale* of this seeming paradox, or the *modus operandi* of the cure, but will simply remind my readers that this nervous headache is a paradoxical, capricious, discouraging, and worrying affection.

#### ANALYSIS OF ONE HUNDRED AND NINE CASES OF RHEUMATISM TREATED WITH SALICYLIC ACID AND SALICINE.

Dr. Brown, late house physician at the Boston city hospital, has furnished a tabulated statement of all the cases that were treated in the hospital with salicylic acid or salicine since February 12, 1876, at which time this method was first inaugurated there. Cases of undoubted chronic character are excepted. The average amount of acid taken to produce relief was one hundred and fifty-four grains; the quantity varied from thirty to two hundred and ten grains. The average of the time at which relief was effected was 1.46 + days, varying from three hours to four days. The average time to complete cessation of pain was 2.85 + days, varying from twelve hours to fifteen days. The amount required to produce complete relief from pain and mobility of the joints was 531.24 grains to each patient; in each attack was 343.73 grains. The average time during which the acid was taken by each patient was 6.22 days, varying from one day to thirty-one days.

Two cases died, one from pericarditis and

one from cerebral complications. Eighteen cases had one relapse, three had two and one had five while in the hospital. The universal result of the acid, when given in full doses, was to cause a fall of the temperature. On the pulse and respiration the effect was less marked; in fact, the pulse often increased for a time in debilitated subjects. The patients were usually placed upon the treatment by the house physician soon after entrance, ten grains being given hourly while awake. The practise varied from this in some instances. In Dr. Blake's service pills containing three and one-half grains each were made with honey or molasses, and in this form the acid was best taken. The number of cases treated with salicine was too small for instituting comparisons. In three cases of acute rheumatism, with moderate severity, from five to fifteen grains were taken hourly; the average time to relief was two and one-third days; to complete relief six and one-third days; the average amount taken was three hundred and forty-six and two-third grains. The average time in hospital was thirteen and one-third days. It is thought that salicine deserves a more extended trial.—*Boston Medical and Surgical Journal*, February 8, 1877.

#### INJECTIONS OF BROMINE FOR THE RELIEF OF CANCER.

A correspondent of the *British Medical Journal*, writing after a visit to the Samaritan Hospital, says: "We saw also, with Dr. W. Williams, a woman aged 50, whose cervix uteri had been amputated for epithelial cancer by Mr. Baker-Brown eight years before. The actual cautery had been applied later by Dr. Routh, and later still, Dr. W. Williams had injected bromine at three sittings, after which the whole of the affected part came away, and complete healing took place. The parts were now quite sound. There was apparently only an inch of uterus left. The solution used is one part of bromine to three of rectified spirits. This develops heat, and should be prepared some time before being used. From five to ten minims are injected into the tissues by means of a long syringe with a platinum nozzle and an India-rubber piston. It is desirable to remember that it may destroy the sense of smell in the operator, and that this may be prevented by placing alkalized cotton-wool in the nostrils."

#### STRUMOUS OPHTHALMIA.

I have administered Fowler's solution in doses compatible with the age of the child, varying from two to eight minims three times a day, and combined with some general tonic, such as cinchona. The continuance of this treatment for a few weeks, with one drop of a solution of nitrate of silver (four grains to the ounce) dropped into the eye every three or four days, I have never known to fail.—*Thomas Andrew Roberts in British Medical Journal*.

## THE CANADA MEDICAL RECORD & Monthly Journal of Medicine and Surgery.

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### UNIVERSITY OF BISHOP'S COLLEGE—FACULTY OF MEDICINE.

The Sixth Annual Convocation of the Medical Faculty of this University was held at Lennoxville on Thursday, April 5th—Vice-Chancellor R. W. Henneker in the chair. There was a very large attendance of friends of the University, especially of ladies. Dr. A. H. David, the Ven. Dean of the Faculty, read the report for the past session, which stated that the number of students in attendance was forty-six. Of this number thirty-four were from the Province of Quebec, four from the Province of Ontario, one from the Province of Manitoba, five from the United States and two from Bermuda.

The following gentlemen were announced as having passed their examinations:

**BOTANY.**—Henry B. Chandler, Bermuda; James Leslie Foley, Montreal; Joseph Seguin, Lacolle, Q.; Rodolphe E. Leprohon, Montreal; George W. Nelson, Montreal; John McSorley, Jarvis, Ont., and George O. Gernon, St. Benoit.

**PRACTICAL CHEMISTRY.**—Homer E. Mitchell, Bedford, Q., and William Young, Montreal, both full marks; Rodolphe E. Leprohon, Montreal, D. Gaherty, Montreal, both honorable mention; H. C. Fuller, Grand Rapids, Michigan; John Joseph Cauley, Norwich, Connecticut; C. D. E. Comeau, River David, Q.; Joseph W. Dugald McDonald, Nicolet, Q.; John McSorley, Jarvis, Ont.

**CHEMISTRY.**—Denis Gaherty, Montreal; Chas. D. E. Comeau, River David, Q.; George W. Nelson, Montreal; John McSorley, Jarvis, Ont.; and Rodolphe E. Leprohon, Montreal.

The following gentlemen were announced as having passed the primary examination for the degree of C.M., M.D., consisting of Chemistry, Practical Chemistry, Physiology, Materia Medica, Anatomy and Botany:

Homer E. Mitchell, Bedford, Q.; William Young, Montreal; John Joseph Cauley, Norwich, Connecticut; Herbert C. Fuller, Grand Rapids, Michigan; Robert Hamilton Boyd, Ogdensburg, N. Y.; John McLeod, Lingwick;

Joseph William Dugald McDonald, Nicolet, Q.; Horatio Nelson Curtis, Dunham, Q.

The following were announced as candidates for graduation, having successfully passed the final examination—written and oral—on Practice of Medicine, Clinical Medicine, Surgery, Clinical Surgery, Obstetrics and Diseases of Women and Children, Medical Jurisprudence, Pathology, and Hygiene. The clinical examinations on Medicine and Surgery were held at the Montreal Dispensary, and were of a thoroughly practical character:

Casey A. Wood, Ottawa; thesis, Diabetes. Edward A. Graveley, Cornwall; thesis, Pneumonia. Robert Hamilton Boyd, Ogdensburg, N. Y.; thesis, Post-partem Hemorrhage. John McLeod, Lingwick, Q.; thesis, Phthisis. Horatio N. Curtis, Dunham, Q.; thesis, Typhoid Fever.

**PRIZES.**—Primary prize to Homer E. Mitchell, Bedford, Q. Special primary prize to Mr. Wm. Young, of Montreal, for the very close competition he made with Mr. Mitchell, being only twelve marks behind him. Honorable mention in primary examination to John Joseph Cauley, of Norwich, Connecticut, U. S. Final prize to Casey A. Wood, Ottawa, Ont. Honorable mention to Ed. A. Graveley, Cornwall, Ont. A special prize was given to Homer E. Mitchell, Bedford, Q., for a series of the most beautiful ligamentous preparations. Botany prize to Hen. B. Chandler, Bermuda. Junior dissector's prize to Henry B. Chandler, Bermuda.

Rev. R. W. NORMAN, being called upon for a speech, made a humorous allusion to the danger of being amongst so many doctors. He considered that now that the medical branch had been established on a firm basis the University was doubly assured. He was glad to hear of the success of the school, and trusted that it would long be so. The clergyman often met the physician at the sick bed, and their professions were nearly allied. One ministered to the necessities of the body, the other to the necessities of the soul. Accordingly, they should ever go hand in hand. He had often noticed in a house visited by sickness how eagerly the visit of the doctor was looked forward to; with what feelings of hope and dread; how much stress was laid upon what he said; and he considered it a glorious profession which had for its object the alleviation of pain and suffering.

The *ad eundem* degree of M.D. was conferred upon Dr. Donald Baynes and Dr. Alexander Proudfoot, both of Montreal, and lately appointed lecturers in the Faculty of Medicine. The degree of M.D., *honoris causa*, was, by grace of Convocation, granted to Dr. Robert L. MacDonnell, of Montreal, but, owing to his unavoidable absence, will not be conferred till the Annual Convocation in June.

There was a large attendance of the students in the Faculties of Divinity and Arts.

#### UNIVERSITY OF MCGILL COLLEGE. FACULTY OF MEDICINE.

The Annual special Convocation of this University for conferring degrees in the Medical Faculty was held on the 23th of March, there being a very large attendance of the friends of the University.

The following report of the Faculty of Medicine was read by Dr. Scott:

The following gentlemen, 27 in number, passed their primary examination, viz.:—Anatomy and Physiology, Chemistry, Materia Medica and Pharmacy, Institutes of Medicine and Botany and Zoology:—Becksted Morris, Grantly, O.; Bell Robert, Montreal, Q.; Cameron John D., Glengary, O.; Chisholm Alexander, Lochiel, O.; Fraser John R., Hawkesbury, O.; Gardner Henry H., Orillia, O.; Gibson William B., Dunham, Q.; Greenwood Fred. S., St. Catherines, O.; Guerin James F., Montreal, Q.; Hutchinson John A., Bluevale, O.; Howey William H., Delhi, O.; Irwin John L., Ottawa, O.; McCann John J., B.A., Millbury, Mass.; McCrimmon John, Woodville, O.; McKinley John K., Perth, O.; McNeill Ernest, Montague, P. E. I.; Mills Thomas W., M.A., Hamilton, O.; Neilson Wm. J., Perth, O.; Pinsoneault Bernard, Montreal, Q.; Riley Oscar H., Franklin, Vt.; Rutherford Martin C., Waddington, N.Y.; Setree Edward W., Prescott, O.; Smith Daniel F., Listowell, O.; Stafford Fred. J., Montreal, Q.; Vineberg Hiram N., Montreal, Q.; Webster Arthur D., Kentville, N.S.; Wright John W., B.A., Cressy, O.

The following gentlemen, 19 in number, fulfilled all the requirements to entitle them to the degree of M.D., C.M. These exercises consist in examinations, both written and oral, on the following subjects: Principles and Practice of Surgery, Theory and Practice of Medicine,

Obstetrics, and Diseases of Women and Children, Medical Jurisprudence and Hygiene,—and also Clinical Examinations in Medicine and Surgery conducted at the bedside in the Hospital:—Armstrong George E., Montreal, Q., Hospital Reports; Bell James, North Gower, O., Pathological Reports; Boyle Albert, Charlottetown, P. E. I., Surgical Reports; Brodie John, North Georgetown, Q., Hospital Reports; Burland Samuel C., Philadelphia, U.S.A., Acute Bronchitis; Cannon Gilbert, Almonte, O., Pleurisy; Cameron Duncan Henry, Perth, O., Tubular Nephritis; Cotton Coderic L., Cowansville, Q., Hospital Reports; Farley Jas. F., St. Thomas, O., Bloodless Operations; Fraser Alexander C., Wallaceburg, O., Malaria; Gillis John A. F., Summerside, P. E. I., Hospital Reports; Greaves Henry C., Barbadoes, W. I., Hydrophobia; Jamieson Alex., B.A., Lancaster, O., The Mind and the Nervous System; Lane John A., Prescott, O., Surgical Cases; Law William K., Richibucto, N.B., Typhoid Fever; Miner Frank L., Abercorn, O., Placenta Prævia; Oakley William D., Plattsville, O., Urinary Deposits; Park George A., St. Marthe, Q., Sanitary Science; Smellie Thos. S. T., M.A., Fergus, O., Pathological Reports.

The Holmes Gold Medal was awarded to James Bell, North Gower, O.

The prize for the final examination was awarded to William Donald Oakley, Plattsville, O.

The prize for the primary examination was awarded to Hiram N. Vineberg, Montreal, Q.

The following gentlemen arranged in the order of merit, deserve honourable mention:—In the final examination, Messrs. Cotton, Armstrong, Fraser, Gillis and Brodie.

In the primary examination, Messrs. Neilson, Gibson, Mills, Smith and Greenwood.

PROFESSORS PRIZES.—BOTANY.—Dibble and Mignault.

PRACTICAL ANATOMY.—Demonstrator's Prize in the Senior Class, awarded to John Andrew MacDonald and Thomas W. Mills, M.A., equal.

Those deserving honourable mention for care and assiduity, Brown, Hart, Lawford, McCrimmon, equal, and Stevenson, and Webster.

Junior Class prize awarded to Thomas Gray. Honourable mention, Messrs. McArthur, Gurd, Inksetter, Small and Groves.

The graduates were then called forward and

the *Sponsio Academica* was administered by Professor Craik, M.D., and each in turn presented to Vice Chancellor Dawson, who performed the ceremony of Capping, and delivered to each candidate his diploma of Doctor of Medicine and Master in Surgery.

At the conclusion of this ceremony Dr. Smellie delivered a valedictory address on behalf of his associate graduates. Dr. Gardner, Professor of Medical Jurisprudence, then addressed the graduating class on behalf of the Medical Faculty.

#### PERSONAL.

Dr. T. G. Roddick, Professor of Clinical Surgery, McGill University, sailed for Europe by the "Sarmatian" on the 21st April. He will be absent several months.

Dr. Alexander Proudfoot, (M.D., McGill College, 1869,) has been appointed lecturer on Ophthalmology and Otology in the Medical Faculty of Bishop's University, Montreal. He received the *ad eundem* degree of M.D. from Bishop's University at its convocation on the 5th April.

Dr. Donald Baynes, L.R.C.P., Edinburgh, (M.D., McGill College, 1876), late clinical assistant to Dr. Morrel Mackenzie at the Hospital for Diseases of the Throat, London, and formerly attending physician to the Ear and Throat Infirmary, London, has been appointed lecturer on diseases of the throat in the Medical Department of Bishop's University, Montreal. He received the *ad eundem* degree of M.D. from Bishop's College at its Convocation on the 5th of April.

Dr. George B Shaw has resigned his position as Professor of Chemistry in the Medical Faculty of Bishop's College. Applications for the vacant chair will be received up to the 12th of May.

Dr. Cameron, whose term of service as House Surgeon to the Montreal General Hospital, expires this month, was presented on the evening of the 16th April, with a handsome testimonial from the officers and employees of the Institution. A social evening entertainment was included, and a very pleasant hour or so was passed in the Governors Hall.

Dr. Cline, late Assistant House Surgeon, succeeds Dr. Cameron, as House Surgeon to the Montreal General Hospital.

The Council of Kings College, London, have tendered the chair of Clinical Surgery, rendered vacant by the death of Sir James Ferguson, to Professor Lister of Edinburgh.

We have received from the author, and perused with interest, the "*Mémoire sur la Galvano-caustique par le Docteur Amusat, fils.*" This work is published by Germer Baillière, of Paris, France, and it is well got up.

The application of Electricity and Galvanism in the treatment of cancerous, nervous, rheumatic, and other affections, has attracted the attention of the medical profession for the past few years. Dr. Lawrence, of London, published a *Mémoire* on this subject in 1853, and M. Marshall also spoke of it in an article of the "*Medical Times and Gazette*," in 1854.

Dr. Amusat, however, has carried his observations much further than any of his *confrères*, and he enters minutely into many interesting cases, where the proper use of the "Galvano-caustique" was attended with great success.

We cordially recommend the work to our subscribers.

We have to acknowledge also, from the same author, a pamphlet on his improved catheter. It is replete with useful information.

#### THE ADULTERATION OF FOOD ACT.

We have received, through the politeness of Dr. J. Baker Edwards, the Public Analyst under this Act for the City of Montreal, a copy of the First Report, which is published as a supplement to the Report of the Department of Inland Revenue. Although we cannot say that the reports from the various analysts show an immense amount of work done, or benefits resulting, yet there is an ample evidence of a vigorous commencement. Things have been brought into shape, and some good may ensue, from the fact that at any time samples may be taken and analyzed. Still, the full benefits of the Act will not be derived till the Government decide to prosecute, and, before they do so, several amendments will be necessary. As we received the Report just before going to press, we are unable to look at it in detail. We may do so at another time. We cannot, however, omit the following extract from the remarks of Mr. A. Brunel, Commissioner of Inland Revenue, to the Hon. Minister of the same Department :

"The report by Dr. Edwards (Montreal), of his analysis of the so-called quinine wine, is worthy of notice. It appears that, of five samples submitted to him, only one was found to be in accordance with the official formulæ, the others being, in fact, potable stimulants, containing alcohol, in as large a proportion as is usually found in port or sherry wine, and greatly in excess of what is found in malt liquors."

The manufacturers of this article may reply that they do not pretend that it is made from the official formulæ, and, in so stating, speak truly. But its great strength in alcohol, together with the very unfortunate frequency in which we regret to see it being used, demand from the profession prompt action. Every one, now-a-days, is taking quinine wine for medicine, and we honestly believe a great deal of injury is being done. When quinine is demanded by the system, it can be prescribed with much better results, without the adjunct of a large quantity of alcohol. We ask the profession in this matter to give no uncertain sound. When quinine is required give it in a watery solution, and when wine is demanded, then let wine be given. We do not think we overreach the truth when we say that quinine is required five hundred times as often as is wine. If this is so, why make so many people swallow wine unnecessarily.

#### MORTALITY FROM SMALL-POX AND DIPHThERIA.

Table prepared at the Health Office, showing total number of deaths from Small-Pox in the City of Montreal (exclusive of the Civic Hospitals), from January 1st to February 10th, 1877:—

##### SMALL-POX.

|                                    |     |
|------------------------------------|-----|
| Under six months .....             | 20  |
| Above 6 months, under 1 year ..... | 16  |
| 1 year .....                       | 44  |
| 2 " " 2 " .....                    | 26  |
| 3 " " 4 " .....                    | 25  |
| 4 " " 5 " .....                    | 14  |
| 5 " " 10 " .....                   | 29  |
| 10 " " 20 " .....                  | 7   |
| 20 " " 30 " .....                  | 7   |
| 30 " " 40 " .....                  | 2   |
| 40 " " 50 " .....                  | 2   |
| Total .....                        | 191 |

##### NATIONALITY.

|                        |     |
|------------------------|-----|
| French Canadians.....  | 172 |
| British Canadians..... | 14  |
| English .....          | 1   |
| Irish .....            | 2   |
| United States.....     | 2   |
| Total .....            | 191 |

## VACCINATED AND OTHERWISE.

|                            |     |
|----------------------------|-----|
| Vaccinated .....           | 15  |
| Unknown and Doubtful ..... | 61  |
| Not vaccinated .....       | 115 |

Total ..... 191

Refused vaccination from public vaccinator... 28

## SEX.

|              |    |
|--------------|----|
| Males .....  | 93 |
| Females..... | 98 |

Total ..... 191

## RE-VACCINATION.

Not a single case could be traced in which re-vaccination had taken place.

## DIPHTHERIA.

|                     |    |
|---------------------|----|
| Under 1 year.....   | 6  |
| 1 year to 5 " ..... | 47 |
| 5 " " 10 " .....    | 20 |
| 10 " " 15 " .....   | 3  |
| 15 " " 20 " .....   | 1  |
|                     | 77 |

## SUMMER COURSE BISHOP'S UNIVERSITY.

We direct attention to the advertisement of the first Summer Course in the Medical Department of Bishop's University. The faculty seem to have arranged a most important and interesting course of Lectures and Demonstrations, and we hope that they will be rewarded by a good attendance. Students who can possibly pass the summer in Montreal should do so, as the Hospital advantages are greater then than in winter. Not only are the surgical cases more numerous, but all cases in the Hospital can be more closely followed, the attendance of students being less numerous than during the winter sessions.

## OBITUARY.

Dr. Gordon Buck, one of New York's most brilliant surgeons, died, on 6th March, from uremic poisoning. Dr. Buck graduated at the College of Physicians and Surgeons of New York in 1830, and very shortly after determined to devote himself entirely to surgery. To this special field he devoted the energies of a lifetime. As a surgeon he was remarkable for boldness in operating, and for great thoroughness of detail in the after treatment. His last work, "*Contributions to Reparative Surgery*," issued within the past year, is said to have been the crowning effort of a most distinguished career.

Dr. James Hamilton, of Dundas, Ontario, died on the 1st of March, at the advanced age

of over eighty years. He was a native of Scotland, and obtained the diploma of the Royal College of Surgeons of Edinburgh, in the year 1816. He was one of the oldest medical practitioners in Canada, and took an active part in the medical politics of the Province of Ontario. He represented the Burlington and Home Districts in the Ontario Medical Council, from 1869 to 1872. He felt most keenly the death, last year, of his son, Dr. Andrew Hamilton, of Melbourne, Que., and a hasty journey which he made to his deathbed, somewhat hastened the termination of a disease from which he had been suffering for several years. He was a keen curler, an enthusiastic fisherman, and a genuine lover of his profession. He passed to his long home full of years, and beloved by all who knew him.

## MEMORANDUM.

To prevent the formation of milk, Dr. Peaslee, of New York, recommends that the breasts, after delivery, be tightly strapped by means of adhesive plaster. In five cases he reports perfect results.

One hundred and three students have attended at the Toronto School of Medicine for the Session of 1876-77, of these forty-eight are first year students. Forty-six students attended the sixth Session of the Medical Faculty of Bishop's College, Montreal, for the year 1876-77. McGill University Medical Faculty had students in attendance for the Session 1876-77.

## MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

MEETING HELD MARCH 28 1877.

DR. BELL read an interesting report of a case of "Cancer of the Liver; with obstruction of the common bile-duct; distension of the gall-bladder; adhesion to the broad ligament; hæmorrhage into the gall-bladder and peritoneum; general peritonitis; and death."

The patient was fifty-eight years of age, healthy till her present illness, which she reckoned from fourteen years ago when she had a small tumor in the right inguinal region. It was said to be ovarian by a physician whom she consulted at that time. She suffered no inconvenience from it till last August, when she first consulted Dr. Bell. He found a small smooth tumor, of the size of a hen's egg, apparently connected with the right side of the uterus. In December she began to suffer



pain, and her health began to fail, general appearance becoming cachectic, and finally jaundiced. The area of liver dullness was normal; the tumor appeared to increase in size till it reached the under surface of the liver, was seven inches in length and breadth, with a ridge across it at the level of the umbilicus; the uterine sound entered in a retroverted direction to the normal depth. Movement of the tumor did not move the uterus. On one occasion in palpating the tumor, a soft crackling feeling was detected which Dr. Bell thought at the time might be gall-stones. On the 3rd of March while palpating the tumor in the inguinal region something gave way which was followed by some pain, after this the pulse and temperature, which had up to this been normal, became higher.

DR. OSLER then read the report of the autopsy. The liver was large, three and a half inches below the ribs, gall-bladder immensely distended, attached to the omentum and mesentery. There was some blood in peritoneum, not from a recent hæmorrhage. The liver was of a dark greenish color, with about a dozen tuberos masses of cancer in it. In the gall-bladder were a coagulum and nine or ten gall-stones of considerable size, and at its neck a mass of cancer, extending into the cavity and blocking the duct. The walls elsewhere were thin and free from cancer. Near the duodenum was an ulcer which had been the source of the hæmorrhage.

There was a patch on lower part of the gall-bladder corresponding to one on the broad ligament of the right side where there had evidently been an adhesion which had given way.

DR. REDDY, in reference to the occurrence of jaundice by pressure of tumors external to the liver, said that he had seen two cases of jaundice in pregnant women, but could not say that it was caused by the pressure of the enlarged uterus.

DR. TRENHOLME asked what could have been the tumor in inguinal region fourteen years ago, and if the mass of gall-stones in the lower part of the sac, how had the adhesion taken place? He suggested that perhaps when the uterus was enlarged in a pregnancy an adhesion had taken place, having understood such to be the case, and the gall-bladder had been pulled down. On being told that the adhesion was not to the uterus but rather to the side of the pelvis, he remarked that the difficulty was greater, and asked for an explanation.

DR. ROSS thought that this case was evidence of the necessity of exploring all fluid abdominal tumors with the aspirator. In this case it would have excluded the existence of any ovarian tumor from the recognizable characters of ovarian fluids. A fluid of a mucous character would have been found. He thought that one was never justified in performing ovariectomy without having explored in this way.

DR. F. W. CAMPBELL alluded to the ovarian corpuscles which Dr. Drysdale of New York found as characteristic of ovarian fluids, but which no one else had been able to find.

DR. TRENHOLME would only use aspirator in cases in which there was doubt, because it was not altogether free from danger of hæmorrhage, and that a man should be prepared to perform ovariectomy when he used the aspirator.

DR. ROSS thought it was advisable to aspirate in every case to confirm the diagnosis, even when other signs were undoubted. For instance in a case recently operated on in the city, where there was one large cyst at the back and numerous small ones in front, the aspirator would have detected this fact and have given useful information. The use of a fine aspirator needle was perfectly harmless.

DR. OSLER suggested a very ingenious explanation of the adhesion of the gall-bladder to the side of the pelvis. A gall-stone might have become impacted at the orifice of the duct for a long time, during which time the gall-bladder would become distended by the natural secretion of the mucous lining. The gall-stone might pass when the gall-bladder would empty itself and contract. This same thing might occur again, and at one of these times, from some accidental cause sufficient, inflammation might arise at a point of contact to form an adhesion. He alluded to the fact that gall-stones were frequently associated with cancer of the liver and it was doubtful whether they were a relation to the cancer of the liver as cause or effect; rather inclined to the belief that they were the latter, arising from some perversion in the quality of the bile.

The liver and gall-bladder from this interesting case were exhibited by Dr. Bell. Dr. Osler exhibited a small sacculated aneurism of the descending portion of the thoracic aorta.

A vote of thanks to Drs. Bell and Osler for

their interesting communications was proposed by Dr. Reddy, and seconded by Dr. Trenholme.

J. D. CLINE, B.A., M.D.

*Secretary.*

# MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Meeting held March 30, 1877.

Dr. NELSON read a report of a case of "Stricture of the Rectum" on which he had operated. It was a case of simple fibrous stricture, with no ascertainable specific cause. The stricture was situated one and a half inches above the anus, would admit an instrument the size of a lead pencil, and was annular. On November 29th, with Drs. David and Reed to assist him, he operated, without any anæsthetic, placing the patient in a stooping posture over a bed. Introduced a bistoury along his left index finger, and nicked the stricture to the left and right and anteriorly. The knife went through the stricture with a creaking sound. About a teaspoonful of blood escaped. A sponge tent, made expressly for the purpose, was then introduced. On December 1st, bowels were evacuated without pain of an enormous quantity of fecal matter. The patient passed a large quantity daily for several days. Dr. Nelson stated that this was an operation introduced to the profession some years ago by his father, Dr. Horace Nelson.

Dr. Ross had had two cases recently, both syphilitic in character, in which the stricture involved about one and a half inches of the rectum. In one he performed colotomy, since which the woman's health had been restored and she lives in tolerable comfort. In the other he used gradual dilatation by means of Molesworth's hydrostatic uterine dilators, which he thinks, can be used to advantage when the use of the bougies is excessively painful. He thought Dr. Nelson's case was a very simple one, and one not usually met with.

Dr. TRENHOLME had had two or three cases, which he had treated by the method recommended by Dr. Nelson's father, which he thought differed somewhat from the operation used by Dr. Nelson. He made a deep cut only in the posterior side of the stricture, towards the sacrum, and plugged the incision with lint. All his cases had done well, and he thought the operation very satisfactory.

Dr. BELL had recently treated a case like Dr.

Nelson's, of simple fibrous stricture, by gradual dilatation till he could pass a No. 12 rectal bougie. He drew attention to the quantity of fecal matter which had accumulated, and was passed after the dilatation.

Dr. Ross thought that when with stricture of the rectum such a mass of feces could be detected in the bowels as would be alone a cause of serious danger, colotomy was the operation demanded.

Dr. SHEPHERD mentioned a specimen in one of the hospital museums of London of fecal accumulation where the bowel was as large as a hat in circumference.

Dr. FENWICK congratulated Dr. Nelson on the success of his case, but did not approve of the operation, on account of the danger from hæmorrhage from the large vessels about the lower part of the rectum, when we had other simpler and equally successful methods of treatment.

Dr. NELSON said that the operation spoken of by Dr. Trenholme was that adopted by his father, but he had cut the stricture anteriorly because there it was thickest.

A vote of thanks to Dr. Nelson was proposed by Dr. REDDY and seconded by Dr. SHEPHERD.

Dr. BELL exhibited a specimen of malignant disease of the liver, with great peculiarities, a description of which he will give in a paper to be read at the next meeting.

Dr. Ross exhibited an ovarian tumor, into one small cyst of which hæmorrhage had taken place, rupturing the wall, and causing general peritonitis. The treatment by electrolysis had been tried, and had reduced the tumor by several inches. He drew attention to the very firm adhesions at the site of puncture by the needles.

The SECRETARY read the reply of Mr. and Mrs. Patton to resolutions passed by the Society, which had been sent to them, expressing its sympathy with them in their late bereavement by the death of their son, Dr. E. K. Patton, who had been a member of this Society.

J. D. CLINE, B.A., M.D., Secretary.

## BIRTH.

In Montreal, on the 2nd April, the wife of R. Palmer Howard, M.D., of a son.

## DIED.

In Montreal, suddenly, on the 20th inst., George Begg Shaw, C.M., M.D., a native of Manchester, England; aged 45 years and 6 months, and lately Professor of Chemistry in Bishop's College.

## Original Communications.

*Valedictory on behalf of the Graduating Class of 1877*, by CASEY A. WOOD, C.M., M.D., of Ottawa, Ont., delivered at the Sixth Annual Convocation of the Medical Department (Montreal) of the University of Bishop's College, April 5th, 1877.

MR. CHANCELLOR, MR. DEAN, MEMBERS OF THE UNIVERSITY, LADIES AND GENTLEMEN,—It is with feelings of mingled pleasure and regret that I come forward to deliver the graduates' valedictory address at the close of this, the sixth session of the Medical Department of the University—of pleasure, because my fellow graduates have done me the great honor of selecting me as their valedictorian, and I feel proud to represent the class of '77—of regret, because I know that this Convocation closes my pleasant college life, and we who as students have for the past three or four years been constant companions, who have together gone through the trying ordeal of more than one examination, will in a short time be far apart, with but little prospect of renewing the happy scenes of college days.

Among the most pleasant of the tasks allotted to me is that of thanking our professors for the unvarying kindness we have experienced at their hands. I am sure I am but feebly expressing the heartfelt sentiments of the whole class when I assert that among the professors of no other college could we have witnessed such a continued desire to impart to the students the full benefit of their professional knowledge. Whether or not we can now appreciate to its full extent such gentlemanly and considerate behavior, we feel that we shall carry with us evergreen memories of their untiring zeal and unswerving attention to duty. Knowing as I do their good qualities, I deem those fortunate who, following in our path, become students under them. For all that constant kindness and courteous consideration I am highly honored to be able, whilst bidding them a hearty farewell, to tender them our sincere and grateful thanks.

Fellow-graduates — To you whom I have known and associated with all these pleasant years of our college career I would ask permis-

sion, while disavowing any intention to patronize, to say a few words.

I feel assured that none of you have undertaken the study of so great and noble a profession as that of Medicine without having first recognized the many and varied responsibilities you have taken upon yourselves. I am certain that from the very beginning you must have been cognizant of the fact that the attempt to follow in the footsteps of the Great Physician is a calling though doubtless not incompatible with seasons of pleasure and rejoicing, yet carried on always among scenes of physical pain and suffering, and it must naturally be expected that daily intercourse with want and wretchedness of every kind must have its influence over a life which is truly set "in the midst of so many and great dangers." As session after session went by, and you were nearing the goal you have now so happily attained, let us hope that you were preparing yourselves in every respect for the many duties you from this day forth assume. I do not mean by these preparations your medical attainments only, for the fact that you hold the degrees of C.M., M.D., from this University is a sufficient guarantee of that; but besides the mere acquisition of a certain amount of medical and surgical knowledge are we not justified in asserting that our curriculum is of further benefit to us? Do not the degrees of C.M., M.D., mean something more than competence to practice the different branches of our profession? I answer, Yes. Your title of "doctor" will certainly (and quite properly, too) be regarded by the public as an indication that you possess, or should possess, other acquirements not exclusively medical in their nature. You may question their right to expect anything of the kind—you may indeed give people to understand that your business is only to follow the mechanical occupation of healing the sick, but that will not do away with the fact that you, as medical men, will be required to perform duties the subjects of which do not take the shape of college lectures—do not require an examination—but still affect your after success for good or evil as you pay much or little attention to them.

In these matters you will have to be your own instructors—your text books your own in-born good sense and judgment, and your hospi-

tal that part of the world you live in. May the observations you never cease to make there, the teachers you thus employ, and these books you study, prove of the greatest assistance in overcoming the many difficulties you may expect to meet in your practice.

Allow me to refer briefly to a few of the matters connected with these statements—matters which you will see do not strictly fall within the confines of our medical studies, but which you will acknowledge are not altogether out of place here.

Inasmuch as our calling constantly requires the healthy action of all our functions, mental and physical, and as we know not what moment may arise taxing all our energies and requiring our coolest skill, let us never be found unprepared. May we indeed strive to avoid all habits that enervate the body and weaken the mind—the momentary pleasures of the table and other excesses of any kind, more particularly the vice of intemperance in the use of alcoholic stimuli. Not only have drinking habit a direct tendency to weaken the powers of mind and body, but they engender other vices nearly as lowering. Of the duties that will devolve upon you as future practitioners I might mention that of giving your services to all kinds of people, rich and poor, influential and friendless with the same consideration and kindness. When you encounter pain and distress it will be your duty to give the sufferer all the relief in your power; the probability of the recipient's ability to repay you for the trouble should only be a secondary consideration. It is not your place to enquire whether the suffering portion of humanity that has been thrown in the path of your ministration belongs to the upper class or the lower grade of society, or even whether he is not an outcast from society altogether. Not only then should you be on hand to relieve the sufferings of every one without distinction, but you should do it cheerfully and kindly. Let neither your words nor actions give to the poor and unfortunate one the impression that if you are obliged to labor for nothing you do not intend to do it graciously. A few kind deeds, a few pleasant words, which cost little, may be the means of soothing the last moments of some poor homeless and friendless creature whose whole life has not been "cast in pleasant places."

You must naturally expect to become acquainted with many things that go under the name of "secrets," some of them trivial in their nature, others of importance, all of them capable of causing trouble, and many of them endless misery, if you should be unfaithful enough to make them public property. Remember what you have just sworn, "*Quae denique inter medendum visa vel audita sileri conveniat, non sine gravi causa vulgaturum.*" All-sufficient must the reasons be and urgent the occasion that call for the divulging of any secret a medical man becomes possessed of in the exercise of the duties of his calling. I agree with the author of "Spare Hours" that "there are things a doctor comes to know and is told which none but he and the Judge of all things should know, and he is a base man, and unworthy to be in such a noble profession as that of healing, who can betray what he knows must injure and in many cases ruin."

The study of man as an animal to the exclusion of man as possessed of intellect, reasoning powers and a will, endowments which exercise a mighty influence over the animal economy, is an oversight which cannot be too speedily remedied. I do not wish to begin a dissertation on the influence of mind over matter, but I believe that the progress of Medicine daily calls for a more thorough study of that subject now vaguely known as "human nature," for you must admit that it is in the majority of cases quite needful and right to excite the sympathy and gain the confidence of a patient both to enable you to arrive at an intelligent idea of his ailment and to secure the proper carrying out of your treatment and orders, and these results can only be obtained by the continued exercise of your observing powers in this direction. Let us continue then this most instructive study of man, and if in college we have confined ourselves more particularly to that part of him which is material and tangible, a new sphere of boundless extent now lies open to us in which we can observe the workings of a higher part—the spiritual.

There are those who assert that the study of Medicine has a tendency to make men atheists and materialists, and this idea arises partly from the fact that certain scientists would have us prostitute the proper and interesting studies of physiology and comparative

anatomy by drawing one-sided and far-fetched deductions from discoveries they claim to have made in these branches. For my own part I can see no particular harm in endorsing the views of Wallace, Darwin, Huxley, Lyell and others of the same school, and, without prejudice to certain ideas of mine, I might even be brought to believe in the somewhat irreverent statement of Dr. Francesco that "man, made in the image of God, was also made in the image of the ape;" but on the other hand if these doctrines are calculated to take away from the Creator His attributes of omnipotence and omniscience, to reduce Him to the same level with ourselves and make Him obedient to those laws which He has framed for the guidance of our mortal bodies, then I think such scientific knowledge is put to an unworthy and improper use, for true science is constantly bringing to light facts which instead of striking at the foundation of Christian belief help to strengthen it more and more. Now and then we encounter seeming contradictions, contradictions, too, which some men would render much more difficult to explain than they really are, but I feel certain that, sooner or later, as the world becomes more enlightened upon the subject, these difficulties will be satisfactorily cleared up. It will be found that when a scientific discovery seems opposed to the teachings of Holy Writ, such opposition arises, not from want of harmony between the writings of inspired men and what seems to us to be natural laws, but rather from the comparative ignorance of man concerning those mysterious ways in which an all-wise Creator works out His designs for the government of the Universe.

As medical men we continually make a study of that source from which many of the supposed arguments in favor of materialism are drawn—I refer to the human body, and for this reason I wish to be allowed to say a few words on the subject. In Canada we perhaps do not hear as much of this consoling doctrine as in some parts of France and Germany, where men who, knowing more of medicine, natural history and theology than I ever hope to be able to learn, nevertheless would have us believe that death does not mean the beginning of another life, but oblivion only; that we are born, we live, we die, and that's the end of it.

Not only do they reject the idea of a better world, but they will not even allow us the privilege of again appearing in this life in another form. Oh! Pythagoras, ere we descend to the depths of materialism, give us even a temporary refuge in thy poor belief! Better transmigration than total elimination.

Why, I would rather argue after Lord Byron's style, and say "I'll be a Christian, because if there be a hereafter I shall enter into enjoyment of the happiness promised me, and if there be no hereafter I can only, with the infidel, sink into an eternal sleep."

Time will not permit of my entering into a prolonged discussion of this subject. I would merely say that atheism and materialism are two doctrines that bear within the breasts of all men who are in possession of healthy minds and bodies their own refutation. People of every grade of intelligence look up to some superior being to whom they acknowledge obedience. It was no disordered imagination that suggested such thoughts as these:

"It must be so; Plato, thou reasonest well;  
Else whence this pleasing hope, this fond desire,  
This longing after immortality?  
Or whence this secret dread, and inward horror  
Of falling into naught? Why shrinks the soul  
Back on herself and startles at destruction?  
'Tis the divinity that stirs within us,  
'Tis Heaven itself that points out an hereafter  
And intimates eternity to man.

The soul, secure in its existence, smiles  
At the drawn dagger and defies its point:  
The stars shall fade away, the sun himself  
Grow dim with age, and nature sink in years,  
But thou shalt flourish in immortal youth,  
Unhurt amidst the war of elements,  
The wreck of matter, and the crash of worlds."

Joining diligent attention to the splendid opportunities now afforded us in the way of efficient medical works, journals, and medical associations, and assisted by a thorough course of practical work in hospital and elsewhere, we may, if we are sufficiently active, hope for our sure reward. The brightest prospects are open to those who start out with a fixed determination to succeed. The attainment of success is due, not so much to the amount of knowledge one has, but rather to the continued and faithful diligence with which one strives to use that knowledge. Because Medicine and Surgery have gone forward with so great strides in late years let none of us indulge in a

Capuan repose; rather let us make the best use of those talents confided to our care for the benefit of our common country and our common profession. Why should we not, I ask, cast our mite into that treasury from which we have been allowed to draw our supplies of medical instruction? Our life is a short one, indeed, and uncertain, but much may be done, even as much has been done in a very few years by any one who is willing to work. Bichat was only thirty-one when he died, covered with honors. Of him Corvisart said to Napoleon, "Bichat has just died on a field of battle that counts more than one victim. No man in so short a time has done so much and so well." The Hunterian Museum in London was founded by a man who made for himself the great name that he now holds by close attention to hard work. You will not wonder that he should have accomplished as much as he did when you know that for nearly thirty years his working day began at five o'clock in the morning and ended at or near midnight. I need not say that it is hardly possible for all of us to gain a reputation equal to that of these and other equally distinguished men, but there is no reason why, if we are faithful to ourselves, that we should not hold positions of honor and respect in the medical world.

It should not be forgotten that we owe something to the University from which we have to-day received our degrees. Our endeavor should be to do nothing to degrade its fair name in the eyes of the world. We have an Alma Mater of which we have every reason to be proud; our professors have done all they can to make the curriculum we have pursued as effective as possible; let us then strive to be worthy of such teachers and of such laudable efforts.

You will ere long be called upon to enrol yourselves as members of the Medical Alumni Association, which is to be composed of the graduates in medicine of our college. The object it has in view is, I am sure, a most praiseworthy one, and one which will commend itself to you at once. It aims to be a sort of connecting link between your future medical life and the one which has now become a part of the past. Whatever part of the world you may choose as the scene of your labors, it will

surely be pleasing to know that you hold something in common with those you have left behind. Join it, then, and in joining do not cease to take the same interest in the welfare of the college as you have done for the past four years.

Mr. Chancellor,—The members of the Medical Class of '77 pledge themselves to do all in their power to advance the true interests of this University, from which they have the honor to hold diplomas. We wish Bishop's College every success; may her undertakings prosper and her progress onward and upward exceed the expectations of her most sanguine supporters. The Medical Faculty of Bishop's College may not be as old as some others in our Dominion, but, at the same time, age has not burdened it with any of the formal encumbrances that not unfrequently cramp the usefulness of more venerable institutions.

On behalf of the class I wish to thank the ladies for their presence here to-day. We feel highly honored to know that they take such a lively interest, not only in this, but in every other department of the University.

I consider it somewhat of a misfortune that the students in Lennoxville and those in Montreal see so little of one another—[allow me to hope that it may not always be so]—but I assure the former that in spirit the most kindly feelings are entertained towards them by the students of the Medical Department.

Finally, while I would bid a last farewell, on behalf of myself and the rest of the Class, to all those with whom we have been in any way connected during our college career, I would ask permission to address my concluding remarks more particularly to my fellow-graduates, and since no words of mine could so appropriately express my feelings as do the following extracts, one from the lectures of a well-known professor, the other from the writings of a celebrated poet, I make no apology for reading them:

"The profession which you and I have chosen, or which circumstances have prescribed to us, is a noble profession and worthy the devotion of a lifetime. Trials, no doubt, belong to it and difficulties, but it has also privileges and immunities peculiar to itself. Affording ample scope and exercise for the intellect, it is conversant with objects that tend to elevate the



thoughts, to chasten the feelings and touch the heart. The sad varieties of human pain and weakness with which our daily vocation is familiar should rebuke our pride while they quicken our charity. To us are entrusted in more than ordinary measure opportunities of doing good to our afflicted fellow-creatures—of showing love to our neighbors.

"The profession of medicine having for its end the common good of mankind knows nothing of national enmity, of political strife, of sectarian dissensions. Disease and pain the sole conditions of its ministry, it is disquieted by no misgivings concerning the justice and honesty of its client's cause; but dispenses its peculiar benefits without stint or scruple to men of every country, and party, and rank, and religion, and to men of no religion at all. And like the quality of mercy, of which it is the favorite handmaid, 'it blesses him that gives and him that takes;' reading continually to our own hearts the most impressive lessons—the most solemn warnings.

"Familiar with death in its manifold shapes, we are not permitted to be unmindful that *our* own stay also is brief and uncertain, and *our* opportunity precarious.

"Surely then you will not dare, without adequate and earnest preparation, to embark in a calling like this: so capable of good if rightly used; so full of peril to yourselves and society if administered ignorantly and unfaithfully. And even when you have made it, as you may, the means of continual self-improvement and the channel of health and ease to those around you, let not the influence you will thus obtain beget an unbecoming spirit of presumption; but remember that in your most successful efforts you are but the honored instrument of a superior power—that, after all, 'It is God who healeth our diseases and redeemeth our life from destruction.' "

"The paths of pain are thine; go forth  
With patience, trust and hope—  
The sufferings of a sin-sick world  
Shall give thee ample scope.

Beside the unveiled mysteries  
Of life and death, go stand  
With guarded lips and reverent eyes  
And pure of heart and hand.

The Great Physician liveth yet,  
Thy guide and friend to be,  
And the Healer by Gennesaret  
Shall walk the rounds with thee.

FAREWELL!

*Femoral Hernia.* By JAMES PERRIGO, M.D., Professor of Medical Jurisprudence, University of Bishop College.

The following case may prove of some interest, in helping to shew the benefit to be derived in an early operation.

I was called in the middle of last January to see a Mrs. L., of Petite Côte, who, to use her husband's words, was suffering great pain from a lump having suddenly formed in her right groin. It appeared that she had been the subject of hernia for over two years, which was first contracted by lifting heavy articles of furniture while house cleaning. For this she wore a truss, a very inferior one and not at all adapted for the purpose. It caused her so much pain that she was accustomed to leave it off occasionally, and on this particular night did so, as she was going out to spend the evening at a friend's house. In getting out of the sleigh, her foot became entangled in the robes and she fell with some violence to the ground, when she experienced sudden and intense pain in the groin, followed immediately by vomiting. This happened about nine o'clock in the evening. She was at once taken home and a medical man was sent for, who attempted reduction but to no purpose. Mr. L. came into town for me at 2 a.m., and on my arrival I found her suffering great agony, with a strangulated femoral hernia, about the size of an egg, on the right side. She was in a depressed state, with a very rapid pulse, and suffered a great deal from nausea, although there had been no vomiting, except what took place at the time of the accident. Mrs. L. was always a healthy woman, and a little inclined to be fleshy. Was the mother of six children, and never had any difficulty at any of her confinements. After the full state of affairs were ascertained, she was put under chloroform and reduction attempted, but without success. Knowing that already a previous attempt had been made, and ignorant of the amount of force used in the first trial, I sent into town for Dr. Slack's assistance. Upon his arrival we proceeded to operate. An incision was made over the middle part of the tumor, through skin and fascia, the fascia propria divided and the sac exposed. It was found that Gimbernat's ligament caused the stricture, this was divided, and almost immediately, without any trouble, the contents of the sac returned to the abdominal cavity. There was hardly any bleeding, and the sac was not congested. Everything had a very favorable appearance. The edges of the wound were brought together, pad and bandage applied, and the patient made as com-

fortable as possible.  $\frac{1}{4}$  gr. morph. sulph. was given. The next morning, found her quite easy, and rested from a sleep of six hours. She could not micturate, and her urine was drawn off. This difficulty persisted for five or six days. She was kept on a low diet all the time, and on the 9th day her bowels moved of themselves. On the tenth day she was allowed to move to the sofa.

In most cases of hernia, I am afraid we are apt to delay the operation too long, and sometimes, perhaps, the taxis is over-attempted, injury accomplished, and time given for gangrene to ensue, before the *der-nier-resort* is decided upon.

It is only in cases of children that delay is safe. I had one case, æt. 8 months, ten days ago, where, through the refusal of the parents, the operation was not performed until fifty-eight hours after the descent of the bowel. The sac had quite a dusky appearance, but still the little one recovered very well.

## Progress of Medical Science.

### ON CONSTIPATION.

Clinical lecture delivered in Bellevue Hospital, by  
Wm. H. Thomson, M. D.,

Professor of Therapeutics in the Medical Department of the University of the City of New York.—Phonographically reported for *The N. Y. Medical Record*.

Gentlemen:—I will direct your attention to-day to the treatment of constipation as found among males as commonly, perhaps, as among females. The constipation generally complained of in the male sex I divide into that due to deficient action of the small intestine, and into that due to deficient action on the part of some portion of the large intestine.

Deficient action on the part of the small intestine is due to two causes:

1. Deficient secretion;
2. Want of innervation, or want of muscular action.

Constipation dependent upon deficient secretion is quite distinct from that caused by want of muscular action, and yet you will have many cases in which both causes are operating.

Deficient secretion in the small intestine may be caused by some disturbance of the liver. Constipation, therefore, may date from the time when the patient suffered from some severe form of fever in which the liver was prominently involved, such as the bilious remittent; or, it may follow an attack of tropical diarrhœa, which is almost invariably accompanied by marked hepatic disturbance.

In such cases the patient does not have an extraordinary fecal accumulation and impaction, but there is, instead, a sluggish action of the bowels, and they are usually obliged to take medicine to bring about a movement once in four or five days; and when it does occur, the evacuation is moderate in amount, and quite dry.

This kind of constipation is quite common in the Southern States, as a sequence of the diarrhœa which prevails in that latitude; and it is also frequently seen in the Northern States as the result of malarial poisoning.

The symptoms are extremely negative, except the constipation. The one which, perhaps, gives the patient most discomfort, is a tendency to a dull, indefinite headache. In a majority of cases this is located in the posterior part of the head, is rather an uncomfortable sensation than a real pain, and is best relieved by something which promotes a free discharge of bile. The tongue usually is small, not large and flabby, generally a little reddened along the edges and tip, and the secretions of the mouth are commonly viscid. The condition of the mouth is an indication of the condition present along the entire alimentary canal. We have, therefore, evidence of the presence of only a moderate amount of secretion in the intestinal tube, and our treatment should be regulated accordingly.

If, for the relief of this condition, you administer mild cathartics, the condition of the case will be aggravated, because the temporary stimulus afforded by them, however mild, is immediately overcome by the tendency to deficient secretion. Active purgation produces a much more injurious effect than mild laxatives. If you resort to the use of medicines which have been recommended to stimulate nerve action, you will not obtain much benefit. What you wish to have present in the intestine is a small increase, of lubricating substances, as it were, and, to that end, I have found altogether the best results have been obtained by causing the patient to take a great deal more water than is his usual custom. Let him take, on rising in the morning, two tumblerfuls of Croton or other drinking-water. As a rule, those who drink considerable water are not troubled with constipation. You can insure the laxative action of the water by the addition of some mild saline, like the carbonate of soda, or even common salt, and the reason why such an effect is produced is this: the mixture formed by the union of some saline with water does not readily pass through the mucous membrane, and so into the general system. The theory now generally accepted with regard to the action of salines, is that they are not absorbed, and that they prevent the water with which they are combined from being absorbed; hence the water, by exciting the peristaltic action of the bowel, brings about a movement to discharge it, and with that the other contents of the intestinal tube. There is considerable to lend support to this view. You need not, therefore, give large doses of saline cathartics, as a half-drachm of the sulphate of magnesia, dissolved in a pint of water, commonly operates very nicely.

There is another curious fact which may here be mentioned, namely—the addition of small doses of quinine to salines increases their power of acting upon the intestine. For example:

R. Magnesia sulphas..... 3 i.  
Quin. sulph..... gr. i.  
mixed and taken in a tumbler of water every morning

rarely fails to produce all the laxative effect required, in every form of deficient secretion from the bowels; for instance, in the constipation following fever, when you desire to obtain a free alvine evacuation.

It is well for you to tell the patients that they will not, perhaps, see much effect for one or two weeks, but if they can be induced to persist in the daily use of large quantities of water, a great deal of benefit will almost certainly follow. There is a supposition on the part of the laity that certain fruits are laxative, and that is probably true to a limited extent. *Oranges* may be eaten with benefit, but it usually requires ten or twelve to overcome an obstinate constipation, a fact which renders the remedy quite impracticable in this climate. In the warmer climates, however, the worst forms of constipation which appear can be overcome by oranges alone, and the more juicy they are the better, from the fact that the citric acid which they contain has a tendency to produce a catarrh of the intestine if taken in excess. *Figs* are a rather dangerous laxative, for they may obstruct the intestines; there is not much danger, however, in this direction, if taken with a large quantity of water. It will be found necessary to use about double the amount of water with figs that will be required with any other laxative fruit. The fruits of this climate are very uncertain in their action; the action of apples is very good, but very many persons are unable to take them in sufficient quantity to produce any effect upon the bowels, although they may at the same time take a large quantity of water. All along you will find that water is one of the most important agents to be employed for overcoming deficient secretion in the intestine, attending constipation. If *flatulence*, resulting from decomposition of the intestinal secretion, accompanies the constipation, you may have recourse to the following pill:

R. Assafoetidae.....gr. iv.  
Saponis.....gr. ix.  
M.

To this may be added *nux vomica* if there is evidence of *deficient innervation* in the intestine.

How are you to judge that the leading element in the case is deficient innervation? I am now speaking with more special reference to the small intestine. As a rule, you may say with safety that deficient innervation is an accompaniment of the constipation that troubles persons with sedentary habits of life.

As a rule, it attends the constipation present in elderly persons; and such constipation also occurs among those whose occupation causes them to maintain positions in which the abdominal muscles are to a very great extent motionless, such as shoemakers, tailors, etc., etc. There is also a tendency to headache, and there is a great deficiency in the excretion of the coloring matters of the bile, as might be expected; for the secretory action of the intestines is as much interfered with as the muscular action. Hence this class of patients are of dull sallow color; there is a tendency to greasy accumulations upon the surface; the entire movements are sluggish; and there is usually a lack of frequency in the pulse.

Now, with regard to the treatment for this class of cases.

In the first place, the habits of the patient have a tendency to keep up the constipation, but the means to be employed for overcoming it are quite different from those resorted to in the other class. As a rule, these patients do not bear much water, and why not? Because it weakens their digestive powers, and they will very soon complain of loss of appetite, heaviness in the head, etc.; and it does not excite much peristaltic action in the bowels. At all events it is not nearly so apt to increase the peristaltic action as in the class of cases in which deficiency of secretion in the intestinal canal is the leading element.

What you wish to do here is to arouse the peristaltic action of the bowels, and at the same time increase the general innervation of the secretory apparatus. To do this, the best means that can be employed, if the patient is allowed to remain at his occupation, is water applied externally. The only way in which they can derive benefit from the internal use of water is to send them away from their business to a mineral spring. Then, having a change of occupation, the water taken internally will give them much benefit. But most of your patients will be unable to make this change, and for those water may be used externally with great advantage. Direct that a sitz bath be taken every night, in water as cold as the patient can bear, and have a good reaction afterwards. In a great many cases this simple measure will work wonders, just as it will do in certain cases of deficient innervation of the large intestine.

Another method of using water externally is, on rising in the morning to sponge the spine and bowels with cold salt water, made about as irritant as possible.

In other cases great benefit will be derived by giving the bowels a local shower-bath; and that can be done by dashing the water against the abdomen while the patient is in the standing position. This brings about an action in the bowels the same as a cold hand upon the abdomen causes contraction of the uterus; that is, it is through the sympathy of the nerves of the surface with the viscera underlying them.

In this class of cases *nux vomica* has proven itself a very efficient remedy, and it may be administered in combination with any drug you may wish to use. It will increase the efficacy of small doses of the resinous cathartics, which are irritant and stimulant; hence small doses of rhubarb with *nux vomica* and soap, may be given in the form of a pill with much more benefit than when administered separately.

The application of the faradic current, one pole of the battery placed over the spine, and the other passed up and down over the abdominal walls, will, in many cases, be found beneficial.

What is known as the health-lift will prove advantageous in certain cases, and the reason is that it brings into action all the abdominal muscles, especially the recti, and that action is brought to bear directly upon the sluggish intestines. When any lesion of the bowels is present, the health-lift cannot be employed.

There is another form of constipation that may be mentioned in this connection, and that is the

#### CONSTIPATION DEPENDENT UPON DIABETES.

In that instance it is due to total deficiency of secretion into the intestinal tube, and death may result in consequence of the constipation which occurs in connection with that disease.

#### CONSTIPATION DEPENDENT UPON CERTAIN CONDITIONS PRESENT IN THE LARGE INTESTINE.

We come now to the large intestine, and here we find that constipation depends upon nearly the same conditions as were found present in the small intestines. That is, we have constipation dependent upon deficiency of action, and that it in turn may depend upon deficient secretion or deficient innervation, but it is far more commonly dependent upon the latter. Here the patient may be troubled with large fecal accumulations, and that condition may depend upon deficient nerve power on the part of the colon, or the deficient innervation may be confined to the rectum.

One of the worst forms of constipation may occur, dependent upon no other condition than that which is present in the rectum alone, and unless the physician is upon the alert the result may be the development of a rectal abscess.

When this condition is present, the patients have but little knowledge that they should have a movement from the bowels, and whenever the sensation is developed they have little or no power to expel the fecal accumulation. When such symptoms are present it is a pretty certain indication that they depend upon deficient innervation of the rectum, and, unless that condition is overcome, serious consequences may follow. One of the most common causes of this condition is a chronic inflammation set up about hemorrhoids. Prolonged inflammation of any part, especially, however, about the mucous membrane, produces deficient innervation, and then follows a relaxed condition, and with this deficient innervation we are, therefore, very liable to have prolapsus of the rectum.

These patients are peculiar in one respect, namely: they are very generally low-spirited. It sometimes happens that insanity is developed by such a diseased condition of the rectum, and is relieved when the rectal trouble is removed.

With regard to treatment, the first indication is to keep the rectum empty. When fecal accumulations are present, the most efficient and convenient method of removing them is by means of enemata; but just here I wish to say a few words of caution with reference to resorting to that measure. You should never prescribe enemata as a regular treatment, for if the patient gets into the way of emptying the bowels daily in health by enemata, they can never dispense with their use. If you recommend that the patient should use the syringe every morning for the purpose of evacuating the bowels, and it is continued regularly for six weeks, he has gone considerably far towards making it a necessity during the remainder of his life. Do not abuse the measure if you can possibly avoid

doing so. It will probably be necessary to use this means for removing accumulations which happen to be present, but when they are thoroughly cleared out you should at once resort to other measures for restoring lost innervation to the bowels, and one of the very best of these is the local use of strychnia. It is an exceedingly valuable specific in these cases.

It will frequently succeed in curing the worst forms of prolapsus of the rectum, as well as that condition in which there is simple debility with hypertrophy of the mucous membrane. The manner in which you can carry long-standing cases of prolapsus of the rectum by means of injections of strychnia into the submucous tissue itself is sometimes wonderful. If necessary, you can draw a fold of the mucous membrane down and then insert the injection.

I have relied upon this agent almost exclusively in the treatment of this class of cases, whether the real cause was hypertrophy of the mucous membrane from long-standing hemorrhoids, or there was a simple deficiency of power in the rectum to expel its contents. There is another class of cases in which this agent will prove beneficial, and that is cases of prolonged cystitis from any cause. As is well known, elderly men who suffer from enlarged prostate, suffer more or less from cystitis, and they are always apt to have accumulation of fecal matter in the lower part of the bowels, and it is for the reason to which reference has just been made, namely, deficient innervation. Hence in the treatment of any form of cystitis, especially that accompanying enlarged prostate, if the patient complains that the evacuation from the bowels is small, and that the movement does not seem to completely empty them, clear them out effectually by means of enemata, and then use injections of strychnia, and you will find that in very many cases both conditions will be materially relieved. With the other form of constipation there is a tendency to the formation of scybalous masses. The most common situation of such accumulations is at the upper part of the rectum, and next in the transverse colon. It is only when they are dislodged that they come down into the sigmoid flexure. It is in these cases that you will find the mineral waters most beneficial of anything that can be employed. In the first place, the mineral water will loosen the scybalous masses without depressing the patient in the least, and it will also prevent new accumulations. Of these the Congress or Kissingen may be used, or both may be used at the same time. In this class of cases you will derive considerable benefit from the use of belladonna or stramonium in the form of a suppository. The patient may take his Kissingen water in the morning, and use a suppository of belladonna or stramonium at night. If the belladonna is employed, it should be given in such quantity as will produce a little dryness of the throat and slight dilatation of the pupil the following morning.

\* Faradization along the track of the colon is equally beneficial as in the treatment of constipation of the small intestine, and the hip-bath may also be of service, but it does not answer so good a purpose as when the small intestine is chiefly involved. If you can avoid the use of enemata except for the purpose of remov-

ing fecal accumulation near the anus, do so, for the effect produced by much over-distention of the intestine is bad.

A single over-distention of the bladder may be followed by a permanent weakness for the remainder of the patient's life, and that distention may not last more than eighteen hours. So a single over-distention of the intestine may greatly weaken the normal rhythm of that tube.

#### CONSTIPATION AND FECAL ACCUMULATIONS FOLLOWING FEBRILE DISEASES.

The effect of fever is to dry up all the secretions present in the intestine; consequently a very common complication, when a patient is making a recovery from pneumonia or any other disease in which fever has been a leading element, is an accumulation of feces at different parts of the intestinal tube.

In former days, when fevers were treated upon the plan of administering medicines which were to eliminate the poison from the system by way of the bowels, scybalous accumulation did not occur very frequently; but now-a-days, when the treatment is conducted upon an entirely different plan, the fever may be continued and retained as the direct result of fecal accumulation. This is especially true of the latter stages of a fever; but such accumulation can be prevented from forming, and be removed by the use of a proper kind of cathartic.

For this purpose there is no combination more serviceable than the compound jalap powder, and it is the one which by all means should be employed. It promotes the discharge of the serous elements into the intestine, assists in the absorption of the deposits which have taken place in the lung, if the case be one of pneumonia; also acts upon the kidneys as well as the bowels, and is one of the mildest that can be employed which so fully meets the indications in this class of cases.—*New York Medical Record*.

#### TREATMENT OF CONSTIPATION ASSOCIATED WITH CHLOROSIS.

It was believed to be of nervous origin, and due to paralysis of the intestines; there was also spasmodic constriction of the intestinal tube. The result was complete relaxation and dilatation of the tube at one part, and stricture at another. It was maintained that there was associated with this condition either a deficiency, total suspension, or perversion of the alimentary secretions from the liver down; hence the pale color of the stools and the white viscid mucus that commonly coated the mucous membrane. The constipation being a nervous disease, and due to reflex irritation of the plexuses of nerves and their ganglia which have to do with the innervation of the circulation, the following plan of treatment was recommended:

First, operate upon the peripheral extremities of the nerves involved by means of external application. It was a well known fact that when the feet and hands were plunged into water, contraction of the ovarian plexus of nerves was produced; hence one of

the most natural methods for bringing about increased flow of blood to the uterus was to avail ourselves of the stimulation produced by dry heat applied to the feet and hands. It was believed that many cases of chlorosis could be mainly relieved by the application of dry heat to the feet, and cases were cited in which electricity, applied to the cervix and interior of the uterus, had failed, but heating the feet upon the stove for three hours every day had restored menstruation. Any of the irritant stimulants, when used for the special purpose of increasing arterial circulation, had precisely the same action as dry heat; that is, they stimulated the heart, hence increased the arterial current. In addition to the dry heat, wrapping the feet and arms in cloths wet in a solution of capsicum, and applying the same over the bowels, would be found to be of great assistance in overcoming the constipation.

It was recommended not to resort to cathartics until the measures just mentioned had been employed for some time. Of cathartics, aloes and rhubarb were said to be the most serviceable. The form most convenient for their administration was the compound rhubarb pill, and of those three might be given at night twice a week, or even every night until the bowels had been rendered soluble. Iron should never be relied upon unless used in conjunction with these two remedies. When the bowels had been rendered soluble, iron might be used; but all its preparations were precluded, with a *single exception*. The very best results were obtained by combining sulphate of iron with carbonate of potassa and nux vomica, as in the following prescription:

R. Potassæ bicarb..... 3 ss. to ℥ij.

Ferri sulph..... gr. x.

Ex. nucis vom ..... gr. x.

M. et div. in pil. No. xx.

S.—One to be taken after each meal.

In addition, it was desirable to have a pill which could be administered subsequently, whenever the bowels became confined. To restore innervation and rhythm to the muscular coat of the intestine were the indication to be met by such a pill. For that purpose there were two agents which could be employed—namely, belladonna and nux vomica. For the purpose of restoring intervention to involuntary muscular fibre, belladonna was regarded as the most serviceable. If the two remedies were combined with small doses of a real laxative or cathartic, it would be found that such small doses would produce free catharsis, whereas double the quantity would be required to produce the same effect if administered alone.

For the constipation under the circumstances alluded to, the following prescription was written:

R. Ext. belladonnæ... .. gr. v.

Ext. nucis vom..... gr. x.

Ext. colocynth. co. .... ℥i.

M. et div. in pil. No. xx.

S.—One taken at bedtime.

If the colocynth griped, the griping could be prevented by the addition of ℥ij. of the bicarbonate of



soda, and then dividing the mass into 40 pills, of which two instead of one should be taken.

Electricity was regarded as a valuable agent in the treatment of chlorosis simply because it operated as a stimulant to the circulation, the same as dry heat. It was desirable to apply it to parts associated with the uterine circulation; and that could be conveniently done by placing one pole of the battery upon the soles of the feet, and the other over the sacrum. The proper time for such application was immediately after breakfast, because the electricity also acted upon the intestines, and that being the normal time for an evacuation from the bowels, it might materially assist in overcoming the constipation.

—*The Medical Record*,

#### RUPTURE OF THE SPLEEN, WITH RECOVERY.

According to the *St. Petersburger Med. Zeitsch.*, physician, thirty-three years of age, after an attack of typhus fever, and seventeen days of convalescence had four short but sharp exacerbations of fever, in which the spleen became larger than at any time during his illness. After a severe fit of vomiting, symptoms of rupture of the spleen, with internal hemorrhage, set in; the pain in the epigastrium was intense and paroxysmal; an increased area of dulness was manifested about the enlarged spleen, and there was collapse. The symptoms of extending dulness and collapse increased, the temperature sank, and there was cyanosis and suppression of urine. Bladders of ice were applied to the abdomen, and a grain of opium was given every three hours, and finally subcutaneous injections of camphor were tried and enemata of port wine. On the following day there were no symptoms of peritonitis, and at length there was absorption of the extravasation and general improvement, terminating in recovery. The seriousness of the accident may be judged from the fact that of twenty-two similar cases, conducted by Kerner, all died.—*Berl. Klin. Woch.*, 4, 1877.

#### REMEDY FOR HEADACHE.

By John E. Lockridge, M.D.

Common, idiopathic headache—that is headache not a symptom of any other disease, as fever, sore throat, small pox, etc.—comes as near being an *opprobrium medicum* as any other common and ordinarily innocuous complaint in the catalogue. I say ordinarily innocent as to grave results; yet this is not always the case, for I have seen an ordinary nervous headache develop into congestion and inflammation of the brain, and require the most prompt and energetic treatment to prevent fatal results.

However, the complaint of which I wish to say a word is one in which there is supposed to be no danger whatever; it is the so-called sick-headache, or neuralgic headache, or nervous headache—all of which are synonymous terms. Yet I will probably never forget the case of an

intelligent and interesting young lady, who complained to me that she was then suffering from all of these forms at one and the same time; and indeed she pointed out to me, with anatomical precision, the exact portion of the cranium where each one was domiciled. She viewed me with utter incredulity, when I had the temerity to inform her that they were all one and the same complaint.

Although it is nothing but “a headache,” yet I have seen poor creatures suffer almost indescribable anguish for hours, yea, even for days at a time; and when relief finally came it was only for a period, for *in a month*, or on the occasion of some trivial excitement, or imprudence of diet, exercise or regimen, or perhaps as often without any known or appreciable cause, she would suffer from a recurrence of the complaint. I dare say that there is not a physician of experience but can recur to numerous occasions when he was appealed to for some remedy to relieve these cases of nervous headache, and who has been at a loss to find some remedy that he could recommend with a reasonable degree of certainty, save such a drug as morphia or something of the kind, the after-effects of which would produce sickness of the stomach or loss of appetite for a time, or temporary confinement of the sufferer to her bed. I have thus far spoken as if the complaint was confined to the female sex; but whilst this is true to the extent of perhaps nine cases out of every ten, yet I have seen men suffer very severely from the same affection.

Many times have I been discouraged as well as worried with these cases. “Pain in my head,” is the cry! Sometimes over the brow, sometimes through the temples or in the back of the head, or the whole head aches. Light and noise aggravate it; the room must be darkened and every one must walk noiselessly, suffering almost as much as the patient. Sometimes the head is hot; generally, I believe, there is no unnatural heat, except perhaps, in the case of gentlemen who have spent a late evening over an extra glass of wine, or who have overtaxed their brains from a press of business. Sometimes there is nausea, attended or not with a slight coating on the tongue; just as often there is no nausea or other appreciable derangement of the digestive apparatus.

Now come the perplexity and discouragement. We enjoin quietude and the exclusion of light and sound; we make cold or warm applications to the head as the case may be, and use the hot foot-bath and mustard-plasters to the nucha or temples; we give antacids, or indulge the patient with acids, as oranges, lemons, etc.; we try aromatic spirits of ammonia, lavender, valerianate of ammonia, compound spirits of ether, separately or combined; in short, we go through the whole list of the so-called nervines, antispa-



modies and corrigents; but, in spite of all, the headache pursues its own course in a vast majority of cases.

But now for my remedy. Having observed that bromide of potassium, in twenty or thirty grain doses, and tincture of aconite root, separately, relieved more cases than any remedies I had previously exhibited, I experimented with large doses of the drugs combined. For several years I have been in the habit of giving in these cases sixty grains of the bromide of potassium and ten drops of the tincture of aconite root in a wineglassful of water; the same to be repeated in an hour or two, if the head be not relieved; but a repetition of the dose is very seldom required. In the case of ladies and others who wish to have the remedy always at hand, or who are about to start on a journey, I supply them with the following mixture:

R. Bromide of potassium..... ʒ ij.  
Tincture of aconite root... ʒ j.  
Distilled water, } ..... ʒ ij.  
Simple syrup, }

M. S. Take a dessertspoonful in some water every hour, until relieved.

My recipe may smack of empiricism in appearing as a panacea for every variety of headache, let the cause be what it may and the accompanying symptoms be what they will, but I am willing for it to rest under the soft impeachment, if indeed it relieves promptly only a moiety of these distressing cases. I will not now attempt to give the *rationale* of this seeming paradox, or the *modus operandi* of the cure, but will simply remind my readers that this nervous headache is a paradoxical, capricious, discouraging and worrying affection.

In conclusion, I assure my readers that I claim no new discovery, for these remedies have been used in these cases by others; nor do I claim that there is any charm in the exact dose of these drugs that I prescribe; but I do insist that less than a drachm, of the bromide at least, is wholly insufficient. And furthermore I will say that if I am not fully warranted in guaranteeing that the recipe will relieve every case, I can confidently say that the remedy is entirely satisfactory to me in its effects, which is more than I can affirm of any other remedy, or combination of drugs, that I have ever exhibited.—*American Practitioner*.

#### TREATMENT OF CARBUNCLES.

Dr. Gibbons, in an article in the *Pacific Medical and Surgical Journal*, remarks:

"In the incipient stage the free application of tinct. iodine is the best means in my hands for the abortion of boils. In carbuncle it is not so effective; no doubt because the morbid action is of a more virulent nature. Blisters also have been recommended, applied so as to act on the

surface beyond the limits of the apparent disease. Unfortunately you are seldom called on to prescribe in the earliest stages. The characteristic disease is fully pronounced before you see it, and can not be cut short.

"The leading idea in the local treatment of carbuncle is to impress the surrounding living tissue so as to cause it to throw off the dead as soon as possible. There is an extraordinary apathy or torpor in this respect. The vital power of the tissue is paralyzed so that it stagnates provokingly between life and death. Among the many expedients that have been proposed are subcutaneous circumcision with a bistoury; the injection of tinct. iodine and of carbolic acid with a hypodermic syringe, etc. The injections, the crucial incisions, and caustics expedite matters by hastening the death and destruction of the already half-dead tissue. So far, so good. The subcutaneous cutting may do good by disgorge the capillaries and arousing normal action in the torpid tissue. It looks like good theoretical surgery. Prof. Cooper, the founder of our college, advanced the idea that free incisions in the sound tissue adjacent to certain local diseases—of joints and other parts—tends to cure by producing in the first place a lively recuperative action in the sound part, which extends itself to the diseased part, and changes the morbid processes of that part into healthy action. The idea may not have been original with him, but he carried it into practice farther than any one I have known. Why may not the multiple stabbing of the marginal tissue of a carbuncle have a similar effect?

"But you will never forget that you have also a morbid diathesis to deal with—a cachexia. Something is wrong with the organs of nutrition. Perhaps the liver is at fault. Observe closely, and use your judgment. Do not prescribe for the cachexia, but for your patient. I have been told of a number of individuals who were cured by taking five or six tablespoonfuls of brewers' yeast every day; and I can readily believe this, as it accords with the theory of the citric acid. I have a friend in the East whom I recently saw, and who told me he had been cured of a most inveterate siege of carbuncles, which had lasted six months, resisting stimulants, tonics, and almost every thing, by a course of blue pill extra-professionally administered. He was taking a quinine pill two or three times a day, according to medical law. His wife, a very intelligent and a very positive lady, was seized with a conviction that blue mass would benefit her husband. At any rate she thought it ought to have a trial; so she substituted blue pills for quinine pills. The unsuspecting patient took the pills day after day, though he was conscious they had rather more effect on his bowels, than quinine ought to have, and in two weeks he was well; not another carbuncle showed its horrid head. When I saw him, more than a year after

ward, he had continued in excellent health and entirely free from cutaneous disease. This case accords with my own experience; for I am sure that the blue mass which I took was of great service in removing the remains of the disease; and if I had the ordeal to pass through again, I should certainly try the virtue of this agent without delay in like circumstances."

#### THERAPEUTIC USES OF PHOSPHORUS.

Diseases of the nervous system are unquestionably those in which phosphorus has the most claim to our attention. Here it claims a rôle which no other drug can pretend to play. Here doubtless it acts as a nutrient as well as a tonic. Certainly it appears to be worth a trial in an immense number of cases for which till recently there was no resource except rest, fresh air, perhaps sea air, and phosphorized food. In cases of exhaustion of the nervous system, so commonly induced in fashionable life, it has no substitute, and it has favorable influence in organic disease, whether cerebral or spinal. Of course in all such cases it should not be tried in the acute stage or in stimulating doses, which might be injurious. In chronic white softening of the brain and in paraplegia following myelitis it has been prescribed with varying success, and may be given with iron when we have reason to believe that the condition of the nervous centers is anæmic. Dujardin-Beaumetz has tried it in progressive locomotor ataxy; and although he has not seen any cases cured, he believes that some have been decidedly benefited. Bartholomew has used with benefit phosphorized cod-liver oil in paralysis agitans. Delpech has treated a number of cases of paralysis of various forms by phosphorus. The same author reports that it is of especial value in the peculiar cachexia which affects the workers in India-rubber. He thinks that the bisulphide of carbon to which they are exposed acts as a solvent on the phosphorized brain-fat, and that given as a medicine phosphorus may supply the loss. Turning to the peripheral nervous system, Dr. Anstie considers it of not much value in neuralgia, but others have met with great success, especially in intercostal and trigeminal. Those who look upon neuralgia as due to exhausted nerve power would naturally expect that phosphorus might relieve it. Mr. Ashburton Thompson now gives it in large doses, as much as one-twelfth of a grain, though he formerly employed small ones. It should be remembered that doses of one thirtieth have set up toxic symptoms. In the nervous affections of the aged, accompanied with feebleness of memory, trembling, and cramps, it has been found useful. The wakefulness of aged patients, which is often so troublesome, may often be rapidly relieved by minute doses. Full doses should never be given to old people. In cases of early decay of the mental powers it has

been strongly recommended, as well as in cases of break-down from overwork. In impotence it has been empirically prescribed, as well as for various consequences of sexual excess. Acton and others have given it with marked success in the cachexia induced by masturbation. If it be combined with iron, and care exercised in discriminating the cases, the effect in restoring mental vigor is often remarkable. It should be employed with caution, and never when there is any tendency to plethora, cerebral congestion, or hemorrhage.

The dose of phosphorus, according to the textbooks of materia medica, varies from one-fortieth to one-eighth of a grain; but we consider the last much too high to be safe.—*The Doctor*.

#### ON THE IMMEDIATE CURE OF PILES.

Mr. Reeves, of Edinburgh, has adopted a plan of treating internal piles to which he has given the term "immediate cure." The operation is rapid and the entire treatment short as compared with the ordinary method, viz., by nitric acid, ligature, clamp, and cautery. He thinks, moreover, that it is free from danger and does not always require an anæsthetic. The piles being well down are punctured to their basis by the conical tip of the gas cautery (Dr. Paquelin's). The number of the punctures varies with the number and size of the piles, a pile the size of a half walnut requiring two or three. A dull red heat should be employed, and the point of the instrument is to be gently rotated while it is within, otherwise a portion of the eschar will be withdrawn and then hemorrhage may ensue. Ulcers or fissures should be cauterized at the same time. Should there be any oozing a touch of the cautery will stop it. The piles are then to be returned and a half-grain morphia suppository inserted. After the bowels have been confined for four or five days a warm injection is to be given, and followed upon the succeeding day by a laxative. At the expiration of a week the patients are discharged. Of eighteen cases thus operated on two were not allowed out for ten days and one for a fortnight, but in these cases there was some uterine or urinary complication. All the patients were examined subsequently, and it was exceedingly difficult to discover by the finger or the speculum that there were any cicatrices following the operation.—*Lancet*, February 17, 1877.

#### CAMPHORATED ETHER IN ERYSIPELAS,

Dr. Cavazzani gives the following formula in the *Gazzetta Medica Italiana Provincie Venete*: R. Camphor, 15 grains; tannin, 15 grains; ether, 2 drachms. This is painted every three hours, and sometimes oftener, over the affected parts. The author says that he has never seen this method fail, even in the most severe cases, in which ataxic and adynamic symptoms had already appeared. The

fever soon diminishes, and the local erysipelatous process is arrested in two or three days.

In some cases of phlegmonous erysipelas, which Dr. Cavazzani had under his care, this treatment arrested the progress of the disease. Trousseau prescribed this drug only in cases of circum-umbilical erysipelas in new-born children, and Guibout did not use this solution in phlegmonous erysipelas or in that affecting the face, fearing in the latter case that the meninges would become affected. In seeking an explanation of the action of the remedy, Dr. Cavazzani supposes that erysipelas is nothing else than a lymphatitis, and that the tannin exercises an astringent action on the cutaneous capillaries.—*London Med Record*, Nov. 15, 1876.

#### THE ANTIZYMOtic TREATMENT OF DIPHTHERIA.

Dr. Pavesi describes, in the *Annali di Chimica Applic. alla Medicina*, 1876 (abstract in *Annali Universali di Medicina*, August), a formula which he recommends in the treatment of diphtheria. It is founded on the antizymotic properties of chloral, salicylic acid, and the sulphites. It is as follows:  $\mathcal{R}$  Chloral hydrate, salicylic acid, glycerine, sulphite of soda, each  $1\frac{1}{2}$  parts; distilled water,  $3\frac{1}{2}$  parts; spirits of wine, 1 part. The whole is put into a strong glass vessel, which is closed, and exposed to a heat of  $100^{\circ}$  to  $120^{\circ}$  Fahr. for a few minutes, until the sulphite, salicylic acid, and chloral are completely devolved. A homogeneous solution is produced which is filtered through bibulous paper, and preserved in a well-closed vessel. It is an oily, limpid, colorless liquid, having the odor of its constituent parts. It is insoluble with water. On the application of proper tests, the chloral, salicylic acid, sulphite of soda, and glycerine are found to be unchanged.

Used both internally and externally, is an energetic antiseptic, antifermentative, disinfectant, hæmostatic, and preservative, as well as a destroyer of parasitic organisms. Dr. Pavasi says that it may be used as an antiseptic, and also as a sedative, in a large number of diseases.—*London Med. Record*, Nov. 15, 1876.

#### TREATMENT OF GRANULAR SWELLINGS AND ABSCESES.

M. Quinart has had excellent success in twelve cases of adenitis, which he has treated in the hospital of Ghent, by means of blisters. He is not content with attacking simple engorgement of the glandular tissue at the outset with a series of blisters, as Nelaton advised, but he employs the same treatment when pus has already formed. He has in this way succeeded in obtaining resolution of suppurating glands, that have contained several ounces of pus. When the suppuration is already advanced, and threatens to perforate the skin, the punctures the sack not through the spot where the skin is already thinned, but at

the most dependent part of the tumor, where the instrument must traverse a larger extent of healthy cellular tissue. When the sac is emptied, it is covered, whatever its extent, by a blister which overlaps it on all sides by one or one and a half inches. On the next day the blister is dressed with mercurial ointment; as soon as the skin begins to cicatrize, a second blister is applied, and so on. By this procedure M. Quinart has succeeded in curing an abscess that extended from the angle of the jaw to the clavicle, and which contained over ten and a half ounces of pus. An opening was threatened in the centre of the tumor, where the skin was thinned. The tumor was punctured just above the clavicle, and then entirely covered by a large blister. On the next day the little wound was reopened by means of a stylet, and a quantity of serous pus escaped. On the third day the greater part of the sac was closed; the fluid that accumulated in the most dependent part was reabsorbed, and the patient now presents no mark of this immense abscess, except a small cicatrix above the clavicle.—*Gazette Médicale de Paris*, December 2, 1876.

#### A READY SOLVENT FOR SALICYLIC ACID.

DUFFEY. (*Br. Med. Journal*.)

Dr. D. states that a permanently clear solution of salicylic acid can be conveniently obtained by dissolving it in liquor ammoniæ acetatis. This solution is more palatable than any hitherto advised, and is less apt to cause the burning sensation in the throat and gastric irritation which often attend the administration of salicylic acid in large doses.

Formula :

$\mathcal{R}$  Acidi Salicylic .....gr. cxx.

Liq. Ammon. Acetatis..... $\frac{3}{4}$  ij.

Anquæ..... $\frac{3}{4}$  vj.

M. Ft. mistura.

One-eight part contains fifteen grs. J. S. K.

#### ERGOT IN ATONY OF THE BLADDER.

Prof. von Langenbeck, at a meeting of the Berlin Medical Society stated that in atony of the bladder, associated with enlarged prostate, in elderly men, in which the organ is never completely emptied of urine, he has lately tried the hypodermic injection of ergotine with most surprising results. In three cases the contractile power of the bladder was at once increased so as to enable the patient to discharge additional urine, and in a few days it had so augmented that very little urine was left behind. After one or two injections the improvement was considerable, and even a diminution in the size of the prostate seemed to have ensued. Dr. Israel said that he had derived the same benefit from the employment of the ergotine, and referred to case of a patient who was thus enabled to hold his water for three hours, whereas before he voided it every ten minutes.—*Berlin Klin. Woch.*, January 22.

## AN ELEGANT DISINFECTANT.

EDITORS OF THE CHICAGO MEDICAL JOURNAL AND EXAMINER: *Gentlemen*—Allow me to call attention to a disinfectant, which being free from disagreeable odor, is an elegant substitute for carbolic acid, chlorine, etc., and may properly supersede them in drawing rooms, sleeping rooms, etc., where odor would be objectionable. I refer to a solution of salicylic acid in *eau de cologne*. In "cologne" this acid is very soluble—my druggist dissolves thirty-six grains to f3j. Its antiseptic virtues are well attested. It may be used by means of a spray atomizer upon carpets, curtains, clothing, etc.; and the physician will find it the pleasantest method of disinfecting his clothing. Many persons—ladies especially—while travelling in horse cars and frequenting churches, halls, etc., drop a few drops of a solution of carbolic acid upon their handkerchiefs. It occurred to me that a good substitute would be an ordinary pungent, in which might be dropped some of the salicylic acid solution. It would certainly be a degree more æsthetic, which is not to be despised in public or private.

DR. JAMES I. TUCKER.

## A NEW ABORTIVE TREATMENT OF PNEUMONIA.

ED. MED. AND SURG. REPORTER:—

I wish, through your columns, to direct the attention of the profession to a new abortive treatment in the congestive stage of pneumonia; a treatment as rational in theory as it is simple and effective in practice.

During the past winter I have treated seven consecutive cases (three children and four adults) with the ergot of rye, and in every instance the disease was aborted, and the patient convalescent in from two to three days from the administration of the first dose.

I gave Squibb's fluid extract, in half-drachm doses, for adults, repeated every two hours, until the symptoms were relieved, or ergotism produced indicated by dilated pupils, vertigo, a sense of fullness in the head, drowsiness, etc. In order to test it thoroughly, I used no other remedy, either local or constitutional, and carefully watched the result. In from twenty-four to thirty-six hours the pain was relieved; the high temperature, rapid pulse and hurried respiration brought down to their normal state; expectoration lessened in quantity, and deprived of its blood-stained character; and instead of waiting from seven to nine days for the disease to run its course, as it does under the usual treatment, our patients were entirely relieved in less than half that time.

Such a result in so many cases cannot be regarded as a mere accidental *post hoc*, but justifies the conclusion that it was the direct effect of the remedy.

The contractile power which ergot exerts over circular muscular fibre has been fully established, both

by experimental and clinical observation. It is by virtue of that power that it acts so promptly in cutting short this disease; by lessening the diameter of the capillaries of the lung tissue, it relieves present and prevents further congestion, and the pain, cough, dyspnoea, and pyrexia, which are but expressions of that congestion are relieved *pari passu*. In this manner it acts as a true antiphlogistic; indeed should be placed at the head of the list of that class of remedies.

I hope others will give it a fair and impartial trial in the treatment of pneumonia, and report their success or failure. To do so, be sure that a reliable article is used, as much of the ergot in the market is worthless, and its uncertain or negative action due to that fact. Administer it in such doses, and at short intervals, that the system may be rapidly brought under its influence which can only be known by producing its specific effects.

Do not complicate the treatment by the use of other remedies at the same time, but give it singly and alone; let it stand or fall upon its own merits. After the disease is controlled it should be continued for a day or two longer as in the weakened capillaries, if entirely set free from its contractile power, they might easily give way to congestion again. In one of my cases I discontinued the medicine as soon as the symptoms were relieved, and a relapse occurred but it readily yielded again to the same treatment.

J. B. SCEARCE, M.D.

Chillicothe, Ohio, March 13th, 1877

## ECZEMA AND PSORIASIS—ARE THEY LOCAL DISEASES.

The Dermatological Section of the International Medical Congress, after hearing and discussing a paper on this subject, read by Dr. L. D. Bulkley, adopted the following conclusions:

1. Eczema and psoriasis are distinct diseases. The former is to be clearly distinguished from artificial dermatitis, and the latter from the eruptions of syphilis, sealy eczema, and psoriasis.

2. Eczema and psoriasis cannot own a double causation or nature, at one time local and at another constitutional, but, with other diseases, may have a two-fold cause, a pre-disposing and an exciting.

3. Eczema and psoriasis, in many of their features, resemble the accepted constitutional diseases more than they do to those recognized as local.

4. Eczema is most properly likened to catarrh of the mucous membranes—it is very probable that some attacks called catarrh are eczema and psoriasis of the mucous tissue.

5. Both eczema and psoriasis resemble gout and rheumatism in certain respects, and are dependent upon a somewhat similar, although as yet unknown constitutional cause; much of the skin lesion must be looked upon as the local result or remains of the diseases.

6. There as yet exists no microscopical or physiological proof that eczema and psoriasis are the sole

result of local cell disorders, either congenital or acquired, or due alone to perverted nerve action.

7. Local causes play a very important part in this etiology of eezema. They are probably inoperative in psoriasis.

8. Local treatment is often insufficient alone to remove the lesion of eezema and psoriasis, and cannot prevent or delay relapses; its success does not necessarily demonstrate the local nature of these affections.

9. Constitutional treatment alone and singly can cure many cases of eezema and psoriasis, and prevent or delay relapses in a certain proportion of cases. Under constitutional treatment is included every agency not properly classed among local measures.

10. The total weight of evidence and argument is that eezema and psoriasis are both manifestations of constitutional disorders, and not local diseases of the skin.

#### OIL OF TURPENTINE IN SCIATICA.

In the *Edinburgh Medical Journal* for March, there is an interesting paper by W. Allan Jamieson, M.B., M.R.C.P.E., on "The Treatment of Sciatica by Oil of Turpentine." He gives it in the morning, before breakfast, in the following formula:—R. Ol. Terebinth two drachms, Ol. Ricin. four drachms, Tinct. Card. Co. one drachm, Mucilag et Aq. ad oz. ii. This draught is given every third or fourth morning if necessary, but one dose is generally enough. The beneficial effects are supposed to be due to some peculiar action on the intestinal mucous membrane, as pointed out several years ago, in a paper by the late Dr. Warburton Begbie, "On the Actions and Uses of Turpentine."

#### TREATMENT OF MEMBRANOUS CROUP.

Dr. Walcher claims to have had great success in the treatment of membranous croup, both in its primary form and in the form which he regards as secondary to diphtheria of the pharynx. He employs the alcoholic tincture of eucalyptus globulus. Prof. Gubler and Dr. Gimbert, of Cannes, have shown that eucalyptol, the active principle of the eucalyptus, has a special action on chronic catarrhs, with muco-purulent secretion, especially when located in the lungs, and that the resinous principle is chiefly eliminated through these organs. Dr. Walcher employed it with benefit in doses of from  $2\frac{1}{2}$  to 5 drachms per diem, in cases of chronic bronchitis in old people, and in a case of pulmonary gangrene that recovered. He then tried it in several cases of croup, and it succeeded beyond his expectations: in one case of the entire trachea and of the first and second bronchial bifurcations was coughed up, and the patient, a child five years of age, recovered. He has now discarded local applications, and orders an ounce of the tincture of eucalyptus with three ounces of syrup, a teaspoonful of the

mixture being given every hour. The children take it readily, and if given slowly, any diseased part in the pharynx will be sufficiently impregnated with the medicament. A mild emetic of ipecac is given occasionally, if the patient be strong enough to bear it. Cold drinks are given to relieve thirst, and cold applications are made to the head, if there is much congestion. The child's strength is to be kept up by proper nourishment; the alcohol contained in the above mixture is serviceable in this connection. Dr. Walcher has given five drachms and more of the tincture of eucalyptus per diem to a child five years of age, and has never known any bad symptoms to be produced by it. Dr. Siegn thinks that it is indicated in all febrile affections of the respiratory organs, and especially in whooping-cough.—*Gazette Medical de Strasbourg*, Feb. 1, 1877.

#### SYPHILITIC TEETH.

At the inaugural meeting of the Association of Surgeons practising dental surgery, in London, Mr. Jonathan Hutchinson, in a discussion on the "Manifestation of Syphilis in the Teeth," declared that he still adhered to the belief that the teeth, which he described twelve or fifteen years ago as accompanying hereditary syphilis, were really and invariably characteristic of that disease. He thought the confusion of opinion on the subject grew out of the fact that this peculiar deformity had been confounded with other malformations, and especially with that arising from stomatitis, and usually mercurial stomatitis. The test teeth in the case of syphilis are the *central upper incisors of the permanent set*, and he had yet to see the first case in which these presented the single, small, lunar cleft, and were dwarfed in their general dimensions, in any other than a subject of inherited syphilis.

The tooth which is damaged by stomatitis is the first molar, because that is the first tooth in the patient's head to be calcified, and, developing much more rapidly than the rest, it is the tooth which suffers most if stomatitis occurs during the first six months of life. It never escapes if the teeth are damaged by mercury. Next come the four incisors and the canines; and the two pre-molars invariably escape. Mr. Coleman and himself had hit upon the fact that patients with lamellar cataract always have these mercurial teeth; and Prof. Arlt, of Vienna, had added the observation that there is also, connected with these two conditions, a history of convulsions in infancy. The relation of these facts to each other is believed to be, that the mercury is given for the convulsions, the convulsions cause the cataract, and the mercury causes the deformity of the teeth.

In conclusion, Mr. Hutchinson repeated the friendly challenge, which he had given for the



last ten years, that he would take great pleasure in investigating the history of any case of characteristic syphilitic teeth without evidence of syphilis.—*Medical Times and Gazette*.

#### CHLORAL IN INFANTILE CONVULSIONS.

Löwenstamm (Medicinisch-Chirurgisches Centralblatt) speaks of numerous instances in which he has tested the efficacy of this drug in convulsions; and he gives one case in detail. The patient was the third child of a highly nervous woman, who had lost her first and second children from this affection at about the same age as that at which this one was attacked. At the thirteenth day, twitchings of the eyelids and of the angles of the mouth were first observed; these rapidly developed into more general convulsions, which were repeated, later, every ten minutes. The infant was first seen on the sixteenth day of life. He showed then strong twitchings of the face, trismus, clonic spasms of the limbs, spastic contractions of the thumbs, and contracted pupils; the fit terminated, at the end of five minutes, in profuse perspiration. Two grains of chloral hydrate were given every hour. The convulsions diminished in frequency and intensity, and, on the following day, he was free from them. As the case was considered to depend upon dyspepsia, an antacid in the form of *magnesia usta* was then given, and no recurrence took place.—*London Med. Record*.—*Amer. Jour. Med. Sciences*.

#### THE WEIGHT OF A DINNER.

The Clinton (Mass.) *Courant* prints the following: At a reunion, on Thanksgiving day, of the family of one of the old residents, in which there were four solid sons, and one solid daughter, three average daughters-in-law, and a medium-sized son-in-law, with grandchildren enough to make the number who were present up to fifteen, the following statistics were taken:

|                                    | Pounds.            |
|------------------------------------|--------------------|
| United weight before dinner.....   | 1862               |
| United weight after dinner.....    | 1897 $\frac{1}{4}$ |
| Net gain.....                      | 35 $\frac{1}{4}$   |
| Average gain per person.....       | 27.20              |
| Greatest gain of any person.....   | 4 $\frac{1}{2}$    |
| Smallest gain of any person.....   | 1 $\frac{1}{4}$    |
| Greatest weight before dinner..... | 185                |
| Greatest weight after dinner.....  | 189 $\frac{1}{2}$  |
| Smallest weight before dinner..... | 28 $\frac{1}{4}$   |
| Smallest weight after dinner.....  | 28 $\frac{1}{2}$   |

#### THE USE OF ATROPIA IN EPILEPSY.

Among the various remedies which have been tried in epilepsy, atropia long ago found a place. For some reason or another it fell out of use until recently, when Dr. Svetlin has recommended it once more to the notice of the pro-

fession. Atropia in small doses diminishes reflex action, and should consequently antagonize that reflex spasm of the vascular centres which is the proximate cause of the epileptic attack. Heretofore atropia has been given in increasing doses and in the form of solution. Dr. Svetlin, however, uses only minute quantities and administers it in pill form, believing the therapeutic effect of the drug given in this form equally decided, while toxic symptoms are not so likely to appear. Dr. Svetlin suggests the following formula: R atropiæ sulph., 0.05 grm. (gr.  $\frac{1}{20}$ ); pulv. et. ext. glycyrrhizæ q. s. ut fiat pil., no. 50. Sig., one pill daily. This may be given week in and week out, since in this dose the drug does not bring on any uncomfortable symptoms.—*Wien. Med. Presse*, December 10, 1876, p. 1612. x.

#### SALICYLATE OF IRON AS AN EXTERNAL DRESSING.

In the *Edinburgh Medical Journal*, of February, Mr. R. Kirk, House Surgeon to the Edinburgh Royal Infirmary, writes:—

Salicylic acid and its compounds have been used, for some considerable time, as antipyretics and antiseptics, and as such fulfilled very satisfactorily what was demanded of them; but still they had the disadvantage, shared also by carbolic acid, of being in no way astringent, and, therefore, of allowing free capillary bleeding after operation, unless pressure was employed. An astringent antiseptic seemed, therefore, to be desirable, and after experiments with a number of salts, trial was made of the salicylate of iron, which seems to have both actions in an almost equal degree.

By adding salicylate of soda to a saturated solution of sulphate of iron, a double decomposition takes place, and sulphate of soda and salicylate of iron are obtained in solution, from which the latter may be easily separated by crystallization.

This is, however, quite unnecessary, as the solution just mentioned is a most convenient form for application, and one which can be prepared in a few moments. Of a bright claret color, with no smell, and with hardly any irritant properties, even when used in strong solutions, it is not so repulsive as some of the more generally used disinfectants and antiseptics. Its antiseptic properties are most easily demonstrated, for urine containing but a small quantity of this salt in solution will remain long free from bacteria when exposed to the same influence as those which are conducive to the life of bacteria generally.

The cases to which this salt has been applied have generally been open sores, often with more or less unhealthy action going on, but in each the progress toward recovery has been very rapid after the first few days. As an illustrative case, I may be allowed to give the following:—

Sarah W., age 67, was admitted into ward 1, Royal Infirmary, under the care of Mr. Joseph Bell, on October 31st, suffering from two varicose ulcers on the right leg. The larger ulcer, about the size of half-a-crown, was situated midway between the ankle and



knee, on the inner side of the limb; and the smaller, the size of a florin, was about two inches lower. The surrounding parts were inflamed, while the ulcers themselves were devoid of granulations, and painful. Rest was at once enjoined, and black wash was employed until the end of November, when the salicylate of iron was employed instead. The ulcers were then as large as florins, and still were almost free from granulations. For the first three days after the solution was employed, there was but little evident progress made, as far as the size of the sores was concerned; but the surface became more healthy, granulations formed; and the edges became softer. Cicatrization now followed rapidly, and cure.

#### RELIEF OF PAIN IN UTERINE CANCER.

Dr. A. E. Aust-Lawrence, Physician to the Bristol General Hospital, writes to the *Medical Times and Gazette*, March 24th:—

I have, unfortunately, generally under my care in hospital and private practice, about from twenty to thirty cases of cancer of the uterus, vagina, or rectum; and the experience of the past twelve months has led me to rely, to a great extent, on the following treatment for the relief of pain:—In cases of medullary cancer of the uterus, and also of advanced epithelioma in the same region, I have been struck with the marked relief often derived from the administration of ergot, in doses of thirty minims every six hours. There is a relief from the intense throbbing which, as a rule, only subsides with each attack of hemorrhage, which, of course, brings with it great exhaustion. I consider the ergot acts in the ordinary way, by lessening the amount of blood in the uterus; and it may also check, to a slight extent, the rapid breaking down of the affected part. A case of medullary cancer in a young woman, thirty-one years of age, was rendered very much less painful by ergot than by any other remedy which was tried. I have a case now under my care, of sarcoma of the uterus, the pain of which is very much relieved by full doses of ergot.

Another drug I have found of great value is croton-chloral hydrate. This, in my experience, has not very much power to lessen the pain at the seat of the cancer, but it is very valuable in lessening the reflected pains in the back, thighs, and groins; and this it has done in several of my cases to a very marked degree. As a local remedy I have found carbolic acid very valuable. I apply it, full strength, by means of a little piece of cotton-wool, through a very small speculum, to the cancerous surface, and then order a lotion with one drachm of the glycerini acidi carbolici to half a pint of water, to be used as an injection night and morning. I have found this drug, used in the way I mention, of great value.

Of course, other drugs suggest themselves to every one, such as opium, Indian hemp, bromide of potassium, etc.; but what I wished to show is that ergot is a very valuable agent in helping to control pain in these cases; that locally I have had better results from carbolic acid than from anything else. I might

also add that a very valuable way of relieving pain in these cases is by small blisters in the groins, dressed with an ointment containing morphia.

#### PEPSIN AND ITS PREPARATION.

In *The Practitioner* for March, Prof. Oscar Liebreich, of the University of Berlin, contributes a valuable paper on "The use of Pepsin in Medicine, and its Preparation," in which he refers to the attempts that have been made to employ the peptones as therapeutic digestive agents, and their failure owing to the rapidity with which they undergo decomposition. He expresses his belief that the field of usefulness of pepsin in practical therapeutics is very great, and that it may be still further extended with very great advantage. But the success of this remedy has been greatly hindered, and the result of clinical and of scientific experiment as to the results which may be obtained have been much confused, by the number of comparatively worthless preparations which have been employed, and by the instability and uncertainty of some of those preparations, which in their most active states have from time to time yielded excellent results, and have thus attained a good reputation. The uncertainty of a potent remedy is almost as injurious and even more misleading than the inertness of a popular remedy, and the treatment of disorders of digestion by pepsin has suffered greatly from both these drawbacks and from both these sources of fallacy.

Following the description of a number of conditions in which the employment of pepsin as a remedy is calculated to be of benefit to the patient, he remarks that there are certain counterindications of the use of pepsin, to which it may be well to refer. Among them are carcinoma and ulceration of the stomach. When there is an ulcer of the stomach it is an object of treatment to afford a smooth covering to the ulcer by bismuth, or by the administration of nitrate of silver; to administer pepsin is to incur the risk of hastening the process of thinning, which there is already too much reason to fear from the action of the normal pepsin of the stomach.

"To fulfil the therapeutical indication of pepsin it is, however, necessary to have a pure and reliable sample. There are various methods of obtaining the article. Thus there is the method of Brucke, by treating the gastric juice (obtained by well-known methods), with a solution of cholesterine in ether; the cholesterine, being precipitated, enters into mechanical combination with the pepsin, and pure pepsin is obtained by removing the cholesterine by the further addition of ether.

This form of dry pepsin is absolutely pure, and from it may be learned the qualities and

powers of pepsin. But the method is too costly for general use, and its advantages are mainly for scientific purposes. There are various dry preparations of pepsin in powder and cake, which are well known, and, I believe, much used in medicine. But these preparations are very far from stable or reliable, and, however active some of them may be when perfectly fresh, they do not remain active, and a large part of the pepsin powders prescribed are absolutely inert. Pepsin, although an albuminoid, differs, among other things, from ordinary albumen in being soluble in diluted alcohol. Advantage has been taken of this to prepare pepsin wines, but the alcohol does not prevent the ferment from undergoing change, and if a "pepsin wine" be examined after some time; it will be found not to contain a trace of pepsin, and to be absolutely devoid of digestive power. I found, many years ago, that to preserve the ferment of pepsin there is only one reliable agent, that is glycerine, the powerful preserver of vaccine-matter and other animal ferments. My first researches on this subject, made many years ago, have been amply confirmed by a great number of observations, and for all scientific experiments on digestion I have now for many years employed only these solutions. I strongly recommend practitioners, for all therapeutical purposes, to employ such a solution. In this way they will avoid the fallacies and disappointment due to the employment of deceptive and unequal preparations, and they will the more readily define the true limits of pepsin as a therapeutic agent, and its place in the armory of medicine. It is not to be reckoned among the most powerful and heroic remedies, but it is one which is of very agreeable and efficacious action; which very frequently gives exceedingly good results in large classes of ordinary and troublesome complaints, and which may be employed with confidence and advantage when its powers are stable and reliable."

#### INTERNAL ADMINISTRATION OF TAR IN PSORIASIS.

Geo. M. Hirons, in *British Medical Journal*, says:

"In the *Journal* of February 19th Dr. R. H. Clay recorded two cases of psoriasis in which tar had been given internally unsuccessfully, but which were soon cured by the external use of the same drug. The following number of the *Journal* contained letters from Dr. McCall Anderson and Mr. Balmanno Squire; the former confidently adhering to his previously expressed opinion 'that tar is sometimes successful after arsenic and other remedies have failed,' the latter pointing to the cases as supporting his statement that 'tar administered internally is not any assistance to outward tar in the treatment of psoriasis.'

"A few weeks later, March 10th, I was consulted by E. S., aged twenty-three, with psoriasis inveterata of twelve months' standing. He stated that he had been treated by several medical men with little or no benefit, although he had taken arsenic in large doses for a considerable length of time. I therefore resolved to try tar internally without any external application, and commenced by giving him 3 grains of liquid pitch made into a pill with flour three times a day. On the 17th he was ordered to take four pills daily. On the 24th it was noted that the eruption was, if any thing, more extensive, but that the patches were not quite so elevated. I then gave him a confection composed of one part of liquid pitch and three parts of treacle. Of this he was directed to take a teaspoonful twice daily. At the end of a week he began to take the same dose three times and in a fortnight four times a day. The four doses, containing about sixty grains of the pitch, were not well borne, producing nausea and diarrhoea, so that it was necessary to omit the drug for several days, and then give it in smaller and less frequent doses. Nevertheless the disease was rapidly declining, and by the middle of June had quite gone. As yet (November 29th) it has not reappeared.

The above case serves to illustrate what I have frequently seen in Dr. McCall Anderson's practice; and if it do not show that tar administered internally assists the outward use of the same remedy in the treatment of psoriasis, it certainly proves that the disease will disappear under its internal use without any external application whatever."

#### TREATMENT OF ACNE.

M. Rodet, of Lyons, prescribes the following treatment in acne. Friction is to be made every evening over the acne papules, with the following ointment:

℞ Adipis, 3 v;  
Sulphuris,  
Tannin, āā gr. viij ad xv.—M.

In the morning the face is to be bathed with warm water to which a little bay rum has been added, the proportion being increased from day to day until it amounts to one-third. M. Doyen, of Lyons, recommends bathing with the following:

℞ Aq. destillat., f 3 x;  
Hydrarg. bichlor., gr. xxx;  
Tinct. lavanduli, f 3 iiss.—M.

Mr. Hardy uses this formula:

℞ Aquæ, f 3 x;  
Potassii sulphuret.,  
Tinct. benzoini, ā ā. 3 iiss.—M.

Two teaspoonfuls in a glass of warm water to be used externally. For the treatment of acne erythematosum (*couperose*), Hardy suggests the following:

℞ Hydrarg. protiod., gr. iss ad. ii;  
Ung. aq. rosæ, 3 iv.—M.—*La France Méd.*

# THE CANADA MEDICAL RECORD

## A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D. L.R.C.P., LOND.

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MONTREAL, MAY, 1877.

Will those of our Subscribers who found accounts in the last two numbers of the Record have the goodness to remit the amount?

### WHO DISCOVERED ANÆSTHESIA?

We think it is pretty generally admitted on all sides that to America, or rather to the United States, must be awarded the honor of the discovery of anæsthesia. To whom the individual credit belongs has not by any means been definitely proved, the distinction being claimed by the friends of Morton, Wells and Jackson. We do not propose to discuss their relative titles to the honor—for we think we have just finished reading a paper from the pen of Dr. J. Marion Simms—published in the *Virginia Medical Monthly*—for May which shows most conclusively that neither of these gentlemen are entitled to the distinction. Dr. Simms claims that Dr. Crawford W. Long, of Athens, Georgia, is the real discoverer of the uses of sulphuric ether as an anæsthetic, and gives evidence that it was so used by him in 1842, two years before Morton came on the scene with nitrous oxide, and four years before Wells used ether in the operating theatre of the Massachusetts General Hospital. The interesting part is that Dr. Long is still alive to give his own account of the affair, and to substantiate it, by means which put its truth beyond a doubt. Dr. Simms' paper is so interesting that we offer no apology for presenting to the readers of the *Record* the main facts contained in it. Dr. Simms states that in October, 1876, Dr. Wilhite, of Anderson, S. C., had a surgical operation performed by him on his daughter,—ether being given fully and freely. While waiting for the patient to return to consciousness, Dr. W. said, "*I assisted at the very first operation performed under ether.*" Dr. Simms asked how it was possible, as he had never been in Boston, and Warren, of that city, claimed to have given ether in 1846 for a surgical operation. Dr. Wilhite then explained that Dr. Crawford W. Long, of Georgia, assisted by himself, had, in March,

1842, extirpated a tumor from the neck of a Mr. Venable, who was completely anæsthetized by the inhalation of sulphuric ether; also that he had upon several occasions in 1843-44, while a student in Dr. Long's office, assisted at surgical operations performed by him upon patients rendered perfectly insensible by ether.

He further said that he presumed that he (Dr. Wilhite) was the first person who had ever profoundly etherised any one—and it was under these circumstances. Dr. Wilhite says that from the time he was ten years old (1832), he was familiar with the use of ether by inhalation as an excitant; that the boys and girls in his neighborhood near Athens, Georgia, were in the constant habit of using it; that there was hardly ever a gathering of young people that did not wind up with an ether frolic. Old-fashioned "quiltings" were very common in his day and time, and in the evening the boys and young men would go to these for the purpose of a dance or an ether frolic.

On one occasion, he met several young people about five miles west of Athens, at a quilting. The girls and boys all finished the evening by inhaling ether. Some would laugh, some cry, some fight, and some dance, just as when nitrous oxide gas is inhaled. It was in the fall of 1839. Wilhite was a romping boy of seventeen. All the boys and all the girls had inhaled the ether, some of them more than once. They were looking round for new subjects for it, when Wilhite saw a negro boy at the door, who seemed to be enjoying the sport. Wilhite invited him to come in and try the ether. He refused. Other young men then insisted on his taking it. He refused again in a most positive manner; whereupon some of the thoughtless young men caught hold of the boy, and called Wilhite to give him the ether. He struggled violently, but they threw him down and held him there while Wilhite poured out some ether on a handkerchief, and pressed it firmly over his mouth and nose. He fought furiously. They persisted, thinking it was great fun. After a long struggle, the boy became quiet and unresisting. The young men then let him alone. They were greatly surprised that he did not get up immediately and say or do some foolish thing for them to laugh at. He lay quietly with stertorous breathing. They tried to arouse him, but could not. They then became greatly alarmed, and sent one of their number on horseback for Dr. Sydney Reese, at Athens, five miles distant. The messenger rode with all possible speed. He fortunately found Dr. Reese at home, who lost

no time in going with the messenger. On his arrival, he found the negro lying on his back still soundly asleep. Young Wilhite, and his principal accomplice, thinking that they had in mere play murdered a fellow being, were so much alarmed that they contemplated making their escape from the country; but the timely arrival of Dr. Reese soon restored their courage. Dr. Reese heard the history of the transaction. He then threw water in the face of the sleeping negro, slapped him, raised him up, shook him violently, and after a little he was roused to consciousness, greatly to the relief of all present. Dr. Wilhite thinks it was more than an hour from the time the messenger started for Dr. Reese, till he returned with him. This is unquestionably the first case in which sulphuric ether was ever given to the extent of producing complete anæsthesia.

Dr. Crawford W. Long, of Athens, Georgia, graduated at the University of Georgia (then the Franklin College) in 1835. He studied medicine and graduated at the Medical Department of the University of Pennsylvania in 1839. He then went to Jefferson, Jackson county, Georgia, where he practised medicine for many years. In 1842, he had four students in his office, two of them, Wilhite and Groves, are still living (1877). Dr. Long was 27 years old. His pupils were all from 19 to 21; they were on the best of terms with each other, the Doctor entering into all the sports of his pupils with a hearty good will. On one occasion, they were talking about the inhalation of nitrous oxide gas, when one of his pupils asked him to make some for them. He said he did not have suitable apparatus for it, but that the inhalation of sulphuric ether would produce precisely the same exhilarating effect. One of the young men present said he had inhaled ether while at school, and was willing to do it again. They were all anxious to witness its effects. Dr. Long got some ether immediately and gave it to the young man who had previously inhaled it. He then inhaled it himself, and afterwards gave it to all present. After this, the young Doctor and his pupils indulged occasionally in ether frolics. On several occasions, Dr. Long became furiously excited and could not be controlled. On recovering from the ether intoxication, he frequently noticed that his arms and hands were badly bruised, and yet he was not conscious of having felt any pain at the time he was under the influence of the ether. He also noticed the same thing in his pupils. They were often badly hurt by falls and blows, and were not conscious of pain at the time. These facts, repeatedly observed, sug-

gested to his mind the idea of using ether to prevent the pain of surgical operations. He frequently spoke of this to his students, and at last he determined to give it a trial. Wilhite encouraged him by relating the case of the negro boy he had playfully and unintentionally put under the influence of ether for an hour or more in the fall of 1839.

Dr. Long having made up his mind to try the experiment with ether on the first favorable opportunity, says (*Southern Medical and Surgical Journal*), Dec., 1849:

"The first patient to whom I administered ether in a surgical operation, was Mr. James M. Venable, who then resided within two miles of Jefferson. Mr. Venable consulted me on several occasions with regard to the propriety of removing two small tumors situated on the back part of his neck, but would postpone from time to time having the operations performed, from dread of pain. At length I mentioned to him the fact of my receiving bruises while under the influence of the vapor of ether, without suffering, and, as I knew him to be fond of, and accustomed to inhale ether, I suggested to him the probability that the operations might be performed without pain, and proposed operating on him while under its influence. He consented to have one tumor removed, and the operation was performed the same day. The ether was given to Mr. Venable on a towel; and when fully under its influence I extirpated the tumor. It was encysted, and about half an inch in diameter. The patient continued to inhale ether during the time of the operation, and when informed it was over, seemed incredulous, till the tumor was shown him. He gave no evidence of suffering during the operation, and assured me, after it was over, that he did not experience the slightest degree of pain from its performance."

*This operation was performed on the thirtieth of March, 1842.*

"The second operation I performed upon a patient etherized was on the 6th June, 1842, and was on the same person (Mr. Venable) for the removal of another small tumor. This operation required more time than the first, from the cyst of the tumor having formed adhesions to the surrounding parts. The patient was insensible to pain during the operation, until the last attachment of the cyst was separated, when he exhibited signs of slight suffering, but asserted after the operation was over that the sensation of pain was so slight as scarcely to be perceived. In this operation, the inhalation of ether ceased before the first incision was made."

Dr. Long's four students were present and assisted at the operation. Dr. Wilhite tells me that the etherization of Venable was as complete as it is ever made now-a-days, and that Venable always declared he felt no pain during the operation.

On the 3rd July, 1842, Dr. Long amputated the toe of a negro boy, Jack, belonging to Mrs. Hemphill. Jack felt no pain, having been completely anesthetized.

On the 9th September, 1843, Dr. Long exsected, without pain, three small cystic tumors from the head of Mrs. Mary Vincent, who was etherized for the purpose.

On the 8th January, 1845, Dr. Long amputated two fingers for a negro boy belonging to Mr. Ralph Bailey, sen., the patient being fully etherised and feeling no pain whatever.

Morton's friends have been from the outset clamorous and persistent in proclaiming to the world "that Morton was the first man who ever produced complete anæsthesia for surgical operations." The facts above stated prove incontestably that they were mistaken.

Long's anæsthesia with sulphuric ether was on the 30th March, 1842.

Wells' anæsthesia with nitrous oxide gas was on the 11th December, 1844.

Morton's anæsthesia with sulphuric ether was on the 30th September, 1846.

Thus we see that Long ante-dates Wells two years and eight months, and ante-dates Morton four years and six months.

Dr. Long's operations under the influence of ether were known by all his neighbors—professional and non-professional. Many of these are still living.

Other details are given in Dr. Simms' interesting paper concerning the part played by Morton, Wells and Jackson in the discovery of anæsthesia. We have not room even to glance at them, but simply give the following summary with which Dr. Simms closes the historical portion of his article:—

1st. That since 1800, the inhalation of nitrous oxide gas produced a peculiar intoxication, and even allayed headache and other minor pains.

2d. That Sir Humphrey Davy proposed it as an anæsthetic in surgical operations.

3d. That for more than fifty years the inhalation of sulphuric ether has been practised by the students in our New England Colleges as an excitant, and that its exhilarating properties are similar to those of nitrous oxide gas.

4th. That the inhalation of sulphuric ether, as an

excitant, was common in some parts of Georgia forty-five years ago, though not practised in the colleges.

5th. That Wilhite was the first man to produce profound anæsthesia, which was done accidentally with sulphuric ether in 1839.

6th. That Long was the first man to intentionally produce anæsthesia for surgical operations, and that this was done with sulphuric ether in 1842.

7th. That Long did not by accident hit upon it, but that he reasoned it out in a philosophic and logical manner.

8th. That Wells, without any knowledge of Long's labors, demonstrated in the same philosophic way, the great principle of anæsthesia by the use of nitrous oxide gas (1844).

9th. That Morton intended to follow Wells in using the gas as an anæsthetic in dentistry, and for this purpose asked Wells to show him how to make the gas (1846).

10th. That Wells referred Morton to Jackson for this purpose, as Jackson was known to be a scientific man and an able chemist.

11th. That Morton called on Jackson for information on the subject, and that Jackson told Morton to use sulphuric ether instead of nitrous oxide gas, as it was known to possess the same properties, was as safe, and easier to get.

12th. That Morton, acting upon Jackson's off-hand suggestion, used the ether successfully in the extraction of teeth (1846).

13th. That Warren and Hayward and Bigelow performed important surgical operations in the Massachusetts General Hospital (October, 1846), on patients etherized by Morton, and that this introduced and popularized the practice throughout the world.

#### PERSONAL.

Dr. George Wilkins, Professor of Pathology in the Medical Faculty of Bishop's College, has been elected an attending physician to the Montreal General Hospital, in place of Dr. D. C. McCallum, resigned.

Dr. D. C. McCallum, Professor of Midwifery in the Medical Faculty of McGill College, has resigned the post of attending physician to the Montreal General Hospital. He was elected to the position in 1856, and has faithfully performed his duty ever since. He has been elected to the consulting staff.

Dr. Casey Albert Wood, of Ottawa, a graduate of Bishop's College, has been elected to the Chair of



Chemistry in that school, vacated by the resignation of the late Dr. George B. Shaw.

Dr. E. A. Graveley, (M.D. Bishop's College, 1877) intends settling in Ottawa.

Dr. William Osler, Professor of Institutes of Medicine, in McGill University, was recently the recipient of a complimentary address and a purse of \$100, to aid him in scientific research. The address expressed the esteem in which he was held by his colleagues and students.

Dr. Molson, (M.D. McGill College, 1876), Assistant Demonstrator of Anatomy in McGill College, has been elected one of the out-door physicians of the Montreal General Hospital. The vacancy was created by Dr. Wilkins being elected to the in-door staff.

We beg to remind our readers that the Twenty-eighth Annual Session of the American Medical Association is to be held in the City of Chicago, on Tuesday, 5th June, in Farwell Hall, and we trust to see a good representation from Canada at the meeting. The following gentlemen are the delegates from the Canada Medical Association, but we believe the President is empowered to give credentials to others who may find it convenient to attend: Drs. Grant and Sweetland, Ottawa; David and Hingston, Montreal; Marsden and Russel, Quebec; Thorburn and Fulton, Toronto.

#### THE ROYAL COLLEGE OF PHYSICIANS, LONDON

At a meeting held the end of March, the following by-law was enacted: "Any candidate for the College license who shall have obtained a degree in Medicine or Surgery at either a British, Colonial or Foreign University, recognised by the College, after a course of study and an examination satisfactory to the College, shall be exempt from re-examination on such subjects as the Census Board shall in each case consider necessary."

#### MALE WET NURSES.

The *Journal des Sages Femmes* has a notice of a German physician in Pomerania who makes a specialty of supplying wet nurses. He excites the secretion of milk, independently of pregnancy. This is effected both in women and men. An applicant for a nurse is always asked whether a male or female is desired. The former is preferred by some families under the belief that greater vigor is thus imparted to the offspring.—*The Doctor*, April 1, 1877.

#### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

MEETING HELD APRIL 13TH, 1877.

Dr. Alloway then read a report of three cases in which he had applied nitric acid to the inside of the uterus. He introduced his paper by a quotation from Dr. Lombe Atthill's book on Diseases of Women, where the author attributes the want of success which attends the treatment of metrorrhagia, to timidity on the part of the physician, and recommends a bold application of nitric acid in the cases in which he thinks it is indicated.

The first case was that of Mrs. W., æt. 27, ten years married, with no children, but one miscarriage nine years ago, since which she has had painful menstruation, and, latterly, excessive menstruation. On examination found signs of endometritis and endocervicitis. He tried the application of tincture of iodine to the inside of the uterus for one month, without any improvement. Then made an application of nitric acid, according to Dr. Atthill's directions. It caused no pain and was followed by no bad symptoms. The patient left her bed in three weeks, and menstruated seven days after the usual period, without any pain. Six months after this found a perfectly healthy condition of the parts.

The second case was that of Mrs. F., æt. 26, one year married, no children, who had suffered from menorrhagia for eight months. On examination found endocervicitis with areolar hyperplasia of walls of cervix. Applied nitric acid to inside of uterus once. The next menstruation was normal. The cause in this case was excessive coitus in a delicate woman, and until she was separated from her husband for a time, she did not recover entirely.

The third case was that of a Mrs. M., æt. 31, ten years married, with three children. For the last six months she had suffered from very excessive menstruation. Dilated the canal of the cervix, and with finger in the uterus found a granular condition of the mucous membrane. Applied nitric acid, which was followed by a very sharp attack of metropéritonitis, which almost proved fatal, but which was recovered from after the twentieth day, leaving the uterus firmly fixed in an anteflexed position.

Dr. F. W. Campbell supplemented Dr. Alloway's paper by a report of a case in which he applied nitric acid with perfect success, after various other means had failed, including a systematic trial of Savage's solution of iodine and iodide of potassium. It was a case of subinvolution of the uterus, and the patient's life was in a very critical condition from the metrorrhagia.



Dr. Henry Howard had never seen the injection into the uterus of a saturated solution of acetate of lead fail in such cases, and feared very much the application to the inside of the uterus of an escharotic which could be followed by such disastrous results as occurred in one of Dr. Alloway's cases.

Dr. Reddy had for years been in the habit of applying the acid nitrate of mercury to the inside of the uterus, without any accident, and for the last three years had used nitric acid in the same way with the same fortunate results. On one occasion only, the application being followed by a slight metritis, which he attributed to the fact that he did not, in this case, dilate the canal of the cervix. He used no cervical speculum.

Dr. Trenholme remarked that Dr. Alloway's cases, except the last, were not such as demanded in his opinion the use of nitric acid. He would only resort to it where there was an undoubted granular condition of the mucous membrane. It was unwarrantable where the uterus was only three inches in depth, and not sufficient hyperplasia to cause any displacement. Where there was merely a limited amount of congestion, it could be relieved by leeching, or a pledget of lint saturated with glycerine, which acted by endosmosis. It was only in the granular condition that an escharotic was needed. Probably the fact that the application of nitric acid was not oftener followed by bad results, was due to the prevention of an escharotic effect by the neutralization of the acid by the alkaline secretion. Rest was indicated, especially at the periods of uterine activity, and care in the application of the acid. If canal of cervix were dilated by tents the surface of membrane would be torn, and especially liable to injury by the acid, therefore he did not dilate. The action of the acid nitrate of mercury was a milder means also. He always placed the patient in the dorsal position and allowed a small quantity of water to lie in the lower part of the speculum to prevent an escharotic effect on the external parts. Did not approve of the nitrate of silver at all. The contractions which followed its action were frequently very injurious. As to Dr. Campbell's case, thought if he had persevered in the use of the perchloride of iron, it would have sufficed.

Dr. Reddy remarked that he used a little oil in the bottom of the speculum, to limit the escharotic action of the acid.

Dr. Kennedy had been deterred from the use of nitric acid from the disastrous consequences in some of his friend's cases. Had recently treated two such cases as those reported, by the injection into the

uterus of Savage's solution of iodine and iodide of potassium.

Dr. Fenwick remarked that it was Dr. Atthill's intention in the application of the acid to protect the cervix, and therefore used a cervical speculum. Thought that it was scarcely possible to apply the acid to the fundus without dilating the cervix. Sea tangle tents had been objected to, on the ground that spiculæ from them might tear the mucous membrane and might sometimes be left in the tear. Some of the modes of treatment of the uterus were very violent and attended with very serious results.

Dr. Alloway remarked that his object in reading his paper was not to justify the treatment, but to bring up for discussion the question of the propriety of Dr. Atthill's advice to use the treatment so boldly. Thought that Dr. Atthill was not justified in giving such advice, which was productive of grave errors.

Dr. Campbell thought that if he had not used nitric acid his patient would have died, having given other measures a fair trial. He alluded to one case in which enteritis had followed the application of nitric acid to the uterus.

A vote of thanks to Drs. Alloway and Campbell was proposed by Dr. H. Howard, and seconded by Dr. Reddy.

Dr. F. W. Campbell in presenting a motion proposed by Dr. Trenholme, and seconded by himself, relating to the Board of Health, and the action of the present Mayor in reference to it, alluded to the good which it had done, compared the action of the late Mayor, Dr. Hingston, with that of his successor, Mr. Beaudry, expressed the confidence which the medical men had in it, the necessity of it, and the extreme impropriety of the Mayor's conduct. The motion was as follows:—

"That this meeting recognizing the paramount importance of securing the very best possible sanitary condition of the city, desires to record its appreciation of the valuable services rendered by the Board of Health during the short period of its existence, and to protest against the course of action—in reference thereto—pursued by the present Chief Magistrate of Montreal."

Unanimously carried.

It was moved by Dr. Kennedy, seconded by Dr. Nelson:

"That the Secretary send a copy of the above resolution to the Mayor, the Chairman of the Board of Health, and to each of the daily papers."

Carried.

The meeting then adjourned.

J. D. CLINE, B.A., M.D.,  
Secretary.

MEETING HELD APRIL 27TH 1877.

Dr. Ross read a paper on a case of Aneurism of the Hepatic Artery, with diffuse suppurative hepatitis.

William Henry, æt. 22, had been admitted into the Montreal General Hospital, complaining of pains in the right side and great weakness. There was no dysentery, piles, rectal or intestinal trouble of any kind. His illness had begun with periodically recurring chills, every second day for several times. He was treated for intermittent fever in the Hospital Dispensary, and apparently relieved. After admission the general symptoms were rapid emaciation, occasional chills, high fever with remissions of several degrees; a dirty, dingy hue of skin; a very disagreeable odor, stools light-colored and offensive, no disturbance of digestion, occasional epistaxis, enlargement of liver which rapidly increased, and a dull pain over region of liver. Finally, collapse, with a temperature of  $94\frac{1}{2}^{\circ}$ , followed by a rise of  $8^{\circ}$  and death two days after. After death the liver was found to weigh 10 lbs., the peritoneum inflamed around it, adhesions by lymph to stomach and elsewhere, the general peritoneum healthy, a number of fluctuating collections of pus in all parts of the liver. There was found an aneurism of the right branch of the hepatic artery, three inches long, almost entirely filled with laminated fibrine. There were no signs of general vascular degeneration.

This was a very unique case. One case of abscess of the liver was recorded by Virchow resulting from embolism of the hepatic artery, the origin of the embolus being gangrene of the lung. There were four cases on record of aneurism of this artery, two of them unaccompanied by any hepatic symptoms, and none of them accompanied by suppuration of the liver. Frerichs lays down the symptoms of aneurism of hepatic artery as threefold, (1) the tumor, (2) neuralgic pains from pressure on the hepatic plexus of nerves, and (3) jaundice. It was generally fatal by internal hemorrhage.

Dr. Osler then read a paper on the pathology of this case. Suppurative hepatitis was a remarkable thing as the result of disease of the hepatic artery. Its usual origin was disease of the portal venous system. He described the minute anatomy of the liver, showing the vicarious nature of the portal veins and hepatic artery, the functional and nutritive vessels of the liver, so that if the portal vein were obstructed, the other supplied its function. In this case would have to consider the possibility of two causes, total occlusion of aneurism by clots, or

escape of fibrinous emboli causing numerous areas of necrosis. There were two cases on record of total obliteration of the hepatic artery without suppuration. If the pyloric artery were not involved the organ would not be deprived of blood. Considering the embolic theory, why should suppuration have resulted? Areas of necrosis from mechanical deprivation of blood did sometimes degenerate into pus. The abscesses in this case were not recent, but were all formed with a distinct lining membrane.

Dr. R. P. Howard had seen the specimens when recent, and not knowing of the presence of the aneurism had sought to find a source of infection to the portal system. None had been discovered. In favor of the embolic theory would draw attention to the isolation of the suppurative centres. It was like ordinary pyæmic abscesses from disease of the portal system. Difficult to see how mere mechanical obstruction could lead to this suppuration. Clinically the case was interesting from its resemblance to ordinary pyæmia. There was found pus in the pleura and peritoneum, two serous cavities; the rigors also and remissions of the fever made it resemble pyæmia. Interesting to see a case of arterial pyæmia like venous pyæmia which was common. What was the cause of the aneurism? Was it due to an original embolus which was recognized as a cause of aneurism in the smaller vessels? The patient had not had syphilis. What was the condition of the coats of the artery? Believed that it had been stated that the interior was roughened.

Dr. Osler replied that the trunk of the hepatic artery was perfectly healthy, it was the interior of the aneurism which was roughened. There was a case on record of aneurism of the superior mesenteric artery from an embolus.

Dr. Howard remarked that an embolus would seldom get into the hepatic artery by reason of the angle which it made with the current of blood, but it might occur accidentally.

Dr. Shepherd said that the general vascular system of the body, which had been carefully dissected, was perfectly healthy.

A vote of thanks to Drs. Ross and Osler for their interesting papers was moved by Dr. R. P. Howard and seconded by Dr. F. W. Campbell.

Dr. Osler then exhibited some pieces of muscle, which were filled with encysted trichinae. The specimens were got from the body of a woman who had died at the Montreal General Hospital, from pneumonia.

## DIED.

At Magog, on the 14th May, James B. Hall, M.D., aged 32 years, son of the late Dr. Archibald Hall, Professor of Obstetrics in McGill University.

## BIRTH.

In Montreal, on the 3rd May, the wife of Dr. David A. Hart, of Bedford, Que., of a son.

## Original Communications.

*Cases in Midwifery Practice*, by F. D. Gilbert, M.R.C.S., Eng.

If you think the following case sufficiently interesting please insert it in the *Record*.

As misfortunes seldom come singly I had another severe, lingering, and somewhat interesting case of midwifery, a fortnight ago to day, which I had thought of sending you but finding this takes so much room I refrain from infringing on your space. My first case was a Mrs. M. residing about seven miles from here. She was confined with her first child 13 months ago; the child, still born, had been dead several days; the mother made a good recovery.

I was called in the evening of the 12th. of May, and arrived at the house about 11 p. m., when I found a small boy born, but the placenta was still retained. On making an examination of the abdomen, I discovered all the signs of the presence of another child, and thereupon made a vaginal exploration, but with every effort of the forefinger of my right and afterwards with the two fingers of my left, I could not reach the remaining child to ascertain its position, and, as the patient seemed quite comfortable, and there was no flooding, I allowed her to remain in statu quo for about three hours, when I made another effort to ascertain the presentation, but was equally unsuccessful (the chief singularity of the case consists in the fact of the patient experiencing no pain, in fact she complained of no pain to the last, with the exception of the time during which I had my hand in the uterus), I therefore deemed it advisable to give some Ergotine and commenced with 20 drops of Tilden's Extract every 15 minutes, until in about an hour she vomited, and on making another examination I found I could just reach the bag of membranes which I found hard and unyielding. I therefore discontinued the Ergot for several hours, the membranes very gradually descending but never relaxing in the least the patient all the while expressing herself free from pain. In three or or four hours the membranes though still quite tense ceased to descend and I therefore recommenced the administration of Ergotine, and after giving it every 20 or 30 minutes for another hour and a half the membranes again began to descend, and at about 10 p. m. they presented at the vulva, still perfectly hard and unyielding. I therefore determined to ascertain the presentation. This, however, I found myself unable to do with the fingers of either hand and therefore introduced my left hand and discovered the two elbows and sternum

presenting, and that the child was dead (as I could find neither heart or cord pulsation) and very firmly grasped by the uterus. As the patient had now been in labour (though not in pain) 30 hours, and had retained no nourishment during the time, I thought it best to endeavour to turn at once notwithstanding the contracted state of the womb, as the parts were probably in a moister state than they would be if I waited to relax the uterus by opiates or other means. I therefore with steady pressure on one of the axilla tried to revolve the child but could not succeed, and consequently passed my hand with great difficulty past the body of the child and with the tips of my index and second fingers discovered a foot, but without great danger of rupturing the uterus I could not advance my thumb sufficiently to oppose it to my fingers, my hand being firmly compressed between the body of the child and the uterine walls and by this time pretty severely cramped. I retained it in this position some time in hopes the uterus might relax sufficiently to enable me to use my thumb, but finding it retain its rigidity, and being unwilling to withdraw my hand after all the exertions I had used, I requested the husband to prepare a piece of soft wood about the size and shape only a little longer than an ordinary paper knife, with a notch in the end of it, then taking a piece of strong whipcord I directed him to make a slip noose in the end of it, and putting this over the notched end of the improvised paper knife, I passed it with my right hand up the palm of my left till I reached my fingers, and with their assistance succeeded in passing it around the ankle of the child and drew it tight; I then attempted version, but the child was so firmly grasped by the uterus that it would not turn without bringing the uterus with it. I therefore withdrew my severely cramped hand and gave the patient 30 minims of Baltley's sedative by hypodermic injection and in about half an hour, on making steady traction on the string, I at length succeeded in effecting version and bringing down the foot, after which I experienced no great difficulty in completing the delivery, but the patient experienced no pain whatever after I had withdrawn my hand. I waited upwards of an hour for the placenta, but it did not move, and some flooding coming on I again introduced my hand and found the placenta, single, and firmly adherent to the fundus uteri but with careful manipulation I succeeded in wholly detaching it and with my right hand on the abdomen I brought it completely away and gave my patient half a drachm of Ergot, which had the desired effect of inducing contraction but without any

sense of pain to the patient, and waiting two hours longer without reappearance of the flooding I returned home 38 hours from my first attendance, with directions that I should be sent for if any untoward symptoms occurred.

Two days afterwards, being busily engaged myself, I requested my son to visit her and he informed me on his return that the first child was doing well and that the mother had not a single bad symptom, and she has continued improving as well as though no difficulty had occurred, and is now quite convalescent.

Sherbrooke, June 12, 1877.

#### STARVATION IN THE TREATMENT OF ACUTE ARTICULAR RHEUMATISM.

By CASEY A. WOOD, C.M., M.D.

Since the advent of those two most excellent remedies in the treatment of rheumatism, salicylic acid and salicine, and the undoubtedly good results that have followed their use, it is not a matter of surprise, that one should feel inclined to regard any new remedy as undeserving of notice and unworthy of a trial; but there are cases in which these medicines have not realized the expectations of the physician, and where he is obliged to seek some other plan of treatment.

We will suppose for instance that after the patient has faithfully taken the requisite number of grains of salicylic acid in the proper doses and at proper intervals, and the disease has not yielded to its influence as was confidently anticipated; that perhaps the fever and acid perspiration are not sensibly diminished, and the aching joints are still as painful as ever; or it may be that the irritable stomach refuses to retain the nauseating doses poured into it and vomiting or diarrhoea is set up—the question must then arise in the physician's mind what is next to be done? Shall he go back to the old remedies and try alkalies, colchicum and opium, calomel and opium, or, devoid of faith in everything but his cherished "willow," shall he simply do nothing at all, and, following the treatment so very appropriately styled *expectant*, "wait for something to turn up."

It is for the benefit of such cases especially that this article has been prepared and, while the flood of testimony in favor of the products of the willow allows me to claim for "starvation" only a place second to them in importance, yet it will be found in most cases of rheumatism to act quite as quickly and efficaciously as the former remedies. Without further preface I shall proceed to give a short history of a number of cases of acute articular rheumatism, in

which total exemption from food of any kind formed the chief element in the treatment. These observations have extended over a number of years, and they are all selected for their typical nature, being the common form of acute rheumatism usually observed in the otherwise healthy adult. Special attention is drawn to the almost instantaneous action of starvation in almost every instance.

Case No. 1. A. S., a retired gentleman of English descent, æt. 28, of full, plethoric habit and a *bon vivant*. Had a very severe attack of acute articular rheumatism. Treated by a physician with calomel and Dover's powder, and under this treatment became rapidly worse, the pain in his joints being so excruciating that he cried out with pain when anyone approached too near him. On the fourth day changed both his doctor and the treatment. He was then ordered an antimonial emetic and to take ten drops of the following every three hours *while the pain continued to be severe*: Tinct. Opii f 3 ij, Tr. Colchici f 3 ss. Was also given, every three hours, a teaspoonful of the following mixture: R Potassæ Acet ʒ ss Aquæ ʒ viii. Ordered to take no food whatever for seven days, after which he was allowed an oyster three times a day. On the eighth day he walked down stairs without assistance and entirely free from pain. The amount of food was now gradually increased until it reached the usual quantity.

He recovered perfectly from this attack and had good health for three years afterwards.

Case No. 2. Pat. K., pedlar, æt. 34, of spare habit and very active, being much exposed to the weather. Had two previous attacks, treatment each time having lasted for twelve weeks. Fully determined this time not to have a physician nor to take anything in the shape of medicine. Was persuaded to starve himself for a week, at the end of which he was agreeably surprised to find himself totally free from pain. Took one tablespoonful of milk three times a day to begin with, and gradually increased this and his supply of food until a full meal was taken. It is known as a fact that he had no return of his trouble for at least three years after undergoing this treatment. This man (much to the disgust of the medical men in the neighborhood) has cured several people in the country places where he plies his trade, by the same simple plan.

Case No. 3. M. F., member of Parliament, a French gentleman, aged 58, short, stout, and plethoric. Had a very foul tongue, high fever and sweats, and was perfectly helpless from the pain and swelling in his joints. An emetic being plainly indicated he

was ordered to take one, but would not consent to do so as he said he was sure it would prostrate him too much, but had no objection to a cathartic. The difficulty was got over by administering 3 grains of *tar tar emetic in a black draught*. Violent emesis of course ensued which was blamed on his irritable stomach. Although very much prostrated by this powerful dose he was much relieved, the fever being reduced and his pain lessened. He was then given the same mixture as No. 1, and was completely starved for three days. On the fourth day was allowed an oyster and a poached egg, and on the fifth day half a pint of milk during the day and three oysters three times a day. On the sixth day he was almost well and allowed full diet. Has had no relapse.

Case No. 4. M. P., aged 13, a slight delicate girl. This was her third attack of rheumatic fever, each time previous to this having been sick for nearly two months. Her neck was slightly awry from the disease. Was ordered to take the same remedies as No. 1, except that the emetic given at the outset was a mild one and the dose of opium and colchicum smaller. Fasted five days, and on the sixth day was allowed three oysters to commence with. Left her bed on the seventh day. Has had the best of health since, is rapidly gaining in weight and the torticollis has disappeared.

Case No. 5. E. R., aet. 50, tailor, thin and of nervous temperament. Two days before seeing him had got cold and wet whilst at work in a cellar. Gave a mild emetic, which relieved him.

It was found necessary to starve him for three days only. On the fourth day he was allowed two oysters and a little milk. Went to work on the sixth day and has had no relapse. His general health has improved since his recovery from the attack.

Case No. 6. E. B., aged 60, a stout but active Englishman. This was his first seizure, it being of a very violent and typical nature. Swelling and acute pain in his knees and ancles, with high fever, foul tongue and profuse acid sweats: Gave him an emetic, but purposely omitted the opium and colchicum and the potash mixture, partly for the purpose of trying starvation pure and simple and partly because his pain was so soon relieved by the emetic and abstinence from food. Fasted four days and on the sixth day went to work as usual. Has had no relapse, and his health has been very good since.

Case No. 7. Mrs. W., aet. 24, an English lady of sanguine temperament, medium height and a little inclined to be corpulent.

Her second attack of what was certainly a genuine case of acute rheumatism, all the symptoms of the disease being well marked. The treatment adopted in her case was very much the same as No. 1, starvation extending over a period of four days. She made a good recovery, the last visit being made on the fifth day, when she expressed herself as being perfectly well.

I have notes on twelve more such cases in which the history of the patient, the duration of the disease and the immediate effect of treatment are very similar to most of those related above, and, were it necessary, I could give at least thirty more instances where this plan of treatment has proved equally successful, but for the purposes of this article I do not think it is required, as I merely wish to give an outline of the course usually adopted in ordinary cases of the acute form. I do not claim that in every instance this treatment will produce a certain cure, but so thoroughly am I convinced of its efficacy that I would not change it for the salicylic acid treatment, having had some experience of this drug, which I have tried in several cases only to return to the old plan of starvation. I have seen its good effects in so many instances; in fact, relief has so invariably followed its use that I can almost positively promise a patient who consults me that he will be well again without fail within a week or, at furthest, two weeks after beginning treatment. I ask, can the supporters of any other treatment say more than that?

It might be objected that, in several of the cases reported, colchicum and opium with an alkaline remedy (acetate of potash) were given, that the treatment is only an old one slightly modified, and that the results obtained are directly traceable to these latter remedies and not to "starvation" at all. To this the answer is easy. The opium and colchicum are given merely for the temporary relief of the pain in the joints, and they are discontinued as soon as they have accomplished their object. The potash undoubtedly facilitates the patient's recovery, but all three are given as adjuncts only, for in cases 2 and 6 no medicine was given at all, and yet both patients made a remarkably quick recovery. Again, how many cases of acute rheumatism, even under the most favorable circumstances, recover in from 6 to 10 days when treated by alkalis or colchicum and opium? It may also be objected that starvation can seldom be tried on the debilitated, the very young, or the very old. This objection is a valid one, but it fortunately happens that the disease is rarely seen in those under 10 or over 60. Total abstinence from food does not, as



one might at first imagine, reduce patients suffering, from rheumatism very much, nor do they, as a rule, object to it. I remember one case in particular where a female patient having been relieved in a very few days by this plan, thought there could be no harm in having something substantial to eat, notwithstanding her physician's positive orders to the contrary. A good meal of beef-steak, vegetables, and ale was soon prepared and as quickly disposed of; but I shall never forget the expression of sincere repentance that passed over her pain-stricken countenance as she promised her doctor next day that she would not transgress again, and offered to do without food for an indefinite period, if necessary, rather than suffer such another exacerbation as her indiscretion had brought upon her.

Upon the *modus operandi* of starvation in this disease I have very little to offer. Ignorant as we are of the true nature of rheumatism and of the way its peculiar poison works in the system we are without the most valuable aid to reason out the probable *modus operandi* of any remedy. Why somewhat prolonged abstinence from food should have any influence over inflammation seated in the widely-distributed fibrous structures of the body it is difficult to say. The metastatic character of the disease, and the little good that local treatment does, are among the indications of its systemic character, but whether the real seat of the disease is in the blood or whether it is some important organ of the body that is principally affected it is not the intention of this paper to discuss. From the quick and almost invariably good results to be obtained by simple abstinence from food, I am inclined to the idea that rheumatism is, after all, only a phase of indigestion, and that, by giving complete and continued rest to all the viscera that take any part in the process of digestion the disease is attacked *in ipso radice*.

In most of the cases that I have been able to investigate I have found considerable digestive irritation to exist before the attack set in. Given a number of persons exposed to wet or cold in any shape, some of them will escape altogether, some will have simple coryza, others bronchitis, or perhaps pneumonia, but the malady that concerns us most is almost certain to be reserved for the one who is suffering from indigestion; the congestion that the cold or damp has caused, in each instance seems to search out the individual's weak spot, and, in the case of those seized by rheumatism, my observation, and the good results which rest to the digestive organs gives in the disease lead me to the same conclusion, viz., that the real trouble lies in the irritated or irritable viscera.

In addition to the essentials of the treatment which I have spoken of in the seven cases given, there might be added that *locally* wrapping the joints in cotton wool, and sponging the whole body twice a day with lukewarm water, will be found very soothing to the patient and will help recovery.

An emetic should be administered in almost every case, but it should not be given indiscriminately, and never when the patient cannot readily stand it. If given at all it should be an active one and antimonial, which, though somewhat depressing, is without equal for the relief that follows.

No food whatever should be taken after the emetic has operated, for at least three days (longer if necessary) or until the pain in the joints has considerably subsided. Water or (if the patient prefer it) lemonade is allowed in small and repeated quantities, but starvation is to be regarded as a *sine qua non*. The return to the usual amount of food should be very gradual, and everything eaten during this time should be very digestible. Opium and colchicum are given for the temporary relief of pain and should be discontinued when the desired effect is accomplished. The mixture of acetate of potash will be found useful, but it is not an essential part of the treatment. A pleasing feature of this method will be found in the rare occurrence of cardiac trouble. The treatment by starvation, if followed according to the rules laid down, will be found to realize all that has been claimed for it—a simple reliable remedy for a disease that has long baffled the physician's skill, and the frequency with which rheumatism occurs will give everyone a chance of trying its efficacy.

In making these statements it must not be forgotten that they apply to the acute form only, experience having proved that, when used in the chronic form of the disease, it exercises no marked remedial powers, and has no advantage over the remedies usually employed in such cases.

OTTAWA, June 9th, 1877.

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### Correspondence.

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#### THE NEW MEDICAL ACT.

To the Editor of the Canada Medical Record.

SIR,—Can you inform me through your valuable columns how the new act relating to the profession of medicine and surgery affects medical men who have been in practice for some years, and are already registered in the books of the College of Physicians and Surgeons of Lower Canada.

Clause xxii. of the new act says: "No person



shall be entitled to recover any charge in any court of law, &c., &c., nor be entitled to any of the rights and privileges conferred by the provisions of this act, unless he shall prove that he is registered under this act and has paid his annual contribution to the college."

Now, Sir, as an old practitioner who has paid his ten dollars to the college for enregistration, I take exception to the wording of the above clause, as by it I am deprived of a vested right, and which I am sure was never intended by the Legislature, and which I think would not hold in a court of justice. No law can be retroactive.

Owing to the near approach of the tri-annual meeting of the college, at which I intend to be present, I should like your opinion on this point in the forth-coming number of your journal, as it is a very important matter.

Yours M. D.

[The question asked by our correspondent is a very important one, and partaking, as it largely does, of a legal character, we cannot be expected to give an answer which will be accepted as thoroughly satisfactory. Our correspondent objects to the clause of the new act, compelling registration, and the payment of an annual subscription of two dollars, upon the ground that he acquired certain rights under the old act which cannot be taken away from him. We are inclined to doubt his reasoning; the rights he obtained existed until by a new act he was deprived of them, and, to our mind, the power that gave those rights has the power to abolish them if it in its wisdom see fit to do so. There can be no question as to the fact that in matters not medical, the Legislature has more than once interfered with what may be termed vested rights. Witness, the cadastre, where mortgagees to save their claim on the *property* were compelled to re-register their deed. The importance of having the profession of the Province of Quebec really and properly registered, for previous registration has been a farce, is so great, and the fee for its performance so insignificant, that we hope our correspondent will not offer any further opposition. Let him register himself, encourage his medical friends to do the same, and his solace can be that even if the Legislature did take away "*his vested rights*," he was able to purchase them back for the small sum of three dollars. ED. RECORD.]

*To the Editor of the Medical Record.*

SIR,—I am well advanced in years and have lived in harmony and friendship with my confrères

but regret to find from what I have heard that the younger members of the profession have thought it necessary to obtain a new act, and do away with the old act of the College of Physicians and Surgeons of Lower Canada, which worked well for near thirty years.

This new act contains a clause which is intended to deprive me and others situated as I am of inherent and vested rights, rights obtained in virtue of possessing the Governor Generals' License to practice, granted on the recommendation of the then authorized medical board of examiners.

Notwithstanding clause xxii. of this new bill, I maintain I cannot be deprived of the rights and privileges I have had in, virtue of my license, and can sue for any claim I may have for professional services, and give certificates which will be valid and must be received by all courts of justice in spite of this clause. As this question is an all important one to every British subject I should like your opinion on it.

AN OLD PRACTITIONER.

[We think the answer which we have given to the correspondent signing M.D., will answer equally well for "An Old Practitioner." We recommend him to register, and in his old age help his junior brethren to work the present act, which, though very far from perfect, is yet an improvement on the one which he says, "worked well for nearly thirty years."

ED. RECORD.]

## Progress of Medical Science.

### GALLOPING CONSUMPTION: ITS CURABILITY.

Very interesting it is to note how, from time to time, one or another of our practical physicians are induced to record the recovery of cases thought almost hopeless, and now and then to speak of cure. Dr. McCall Anderson has begun some lectures in the *Lancet* on such cases. He opens with a case of tubercular peritonitis, as it was diagnosed, which made a good recovery under careful regulation of the diet and bowels, cod-liver oil, iodide of iron, &c. In another case, apparently more acute, opium  $\frac{1}{4}$  gr. every hour, with one gr. of quinine in each dose, and iced cloths to the abdomen for half an hour every two hours, were equally successful, the patient being convalescent in five weeks. In reply to those who would argue that true tubercular peritonitis must be fatal, and attribute these successes to errors in diagnosis, Dr. Anderson refers to Mr. Spencer Wells' work on the Ovaries (p. 135), for a case in which the whole peritoneum was actually seen to be studded with innumerable tubercles, and yet the patient made a good recovery, and afterwards married.

In his next lecture Dr. Anderson gave three cases of *acute tuberculosis* as it is commonly termed, and which most authors have regarded as rapidly and surely fatal. No doubt some such cases have been not unfrequently confounded with typhoid. The first case was that of a lad of 17, admitted with a pulse of 132, wiry, temperature 101 to 104, respiration 28, cough, expectoration, &c. "On auscultation, abundant moist *râles* were heard with equal distinctness *all over* both sides of the chest." There was no comparative dullness, but the percussion note all over is described as less clear than natural, but the doctor admits that the normal note differs in different persons, and some will probably feel inclined to dispute the diagnosis. In three days the fever assumed a typhoid form—p. 142, t. 105.6. *Râles* more abundant, and dullness for the first time remarked at the left apex. We doubt not some will be led by this to a still further doubt whether the former general dullness existed; at any rate here is perceptible localised dullness, which may be due to increased deposit here, or possibly to deposit first brought about by the depressed condition of the system labouring under other disease not necessarily tubercular. He was fed with milk, soup, &c., every hour, and took ammonia and brandy, but got worse for about a week. Then he was fed every half hour, the brandy (four ounces) was increased to six, and he was ordered sulphate of quinine and digitalis, of each twelve grains, opium six grains, in twelve powders, one to be taken every two hours. Within twenty-four hours the temperature fell, in a week it was 99, and the improvement generally corresponded. There was only moderate cough, the breathing, comfortable, *expectoration ceased*, and *râles* almost gone, *except at right half of left apex*. From that time he gained flesh and otherwise progressed. Whatever opinion be adopted of this case it seems to be very satisfactory from a therapeutical point of view.

We should add that the diagnosis was confirmed by Surgeon-Major Jameson, who has seen much of acute phthisis in the West Indies. In two other cases detailed (31st March), the physical signs were more distinct, though even in them we think some would not accept the conclusions to which Dr. Anderson leans. It is impossible, however, to deny that the patients were suffering from acute pulmonary diseases, which he says "were hurrying them to their graves," so far as we can see, and that they did recover. The treatment was carefully selected and thoroughly carried out. Atropia to check perspiration; digitalis, opium, and iced cloths to control temperature, and constant feeding with nutrients, and finally brandy from one to two drachms every two hours or more. In one case the effect of iced cloths to the abdomen in completely controlling the temperature was particularly well marked. In twenty-four hours there was a fall from 104° to 98.2°. In this case they were applied when the expectoration had become "rusty," and it might be suggested that this was in fact the turning point of the case, which might be a low form of pneumonic disease not uncommon in strumous people. But it should be

remarked, that, on omitting the application, the temperature again rose, but again responded to the iced cloths, which afterwards easily controlled it. At any rate this application will, we hope, be less feared than hitherto.

#### SUGGESTIONS ON THE FEEDING OF INFANTS. (a)

By William Faussett, M.B., F.R.C.S.I.

A long residence in the neighborhood of a large city has afforded me many opportunities of examining the children of poor persons put out to nurse, who at the very dawn of life have, by one casualty or another, been deprived of the nourishment intended for them by Nature; but that which has aptly or inaptly been denominated "baby farming," on anything like a large scale, is not known, so far as I am aware, in the vicinity of Dublin. The infant children, however, of mothers engaged in service in the city or elsewhere, destitute orphans, and foundlings from the union workhouses, are frequently received into the cottages of the labouring classes, and reared by them with their own families, and, according to my observation, generally treated with humanity and tenderness. The main essential element, however, of sound natural food for the newborn baby is or ought to be milk—human milk, if possible, but otherwise the new milk of cows modified by the addition of a third or fourth part of water—*i.e.*, if not previously watered or "*stretched*," as it is technically called by the professional dairymen—and a slight flavouring of sugar. At the present price of milk, however, and the uncertainty of procuring it at all times of equal purity and richness, all classes of society, but more especially the poor, have many difficulties to contend with.

Without presuming to pass any judgment on the many artificial substitutes which on alleged chemical and scientific principles have from time to time been pressed forward under the notice of the profession and the public to take the place of mother's milk, I beg to call attention to a very cheap and simple article which is always easily procurable—*viz.*, cocoa, and which when pure and deprived of an excess of fatty matter, may safely be relied on as an admirable basis of infant food.

Before entering into certain considerations which the subject demands, I shall simply relate how this substitute for, or, at least, valuable addition to milk, when employed as food for infants, first suggested itself to my mind.

About five years ago a very wretched looking infant, just six weeks old, was brought under my notice, in apparently the last stage of extreme exhaustion, its pale and wrinkled features, with somewhat the expression of old age, its shrivelled limbs and pot-belly, its large beseeching eyes and piteous moans, telling at once the whole history of its sufferings and its wrongs. The father of this unhappy babe was at the time an inmate of the union, an old grey-headed profligate who, though a married man, had seduced its mother, a young girl just turned of six—

teen, subsequently known to her neighbors by the ludicrous *soubriquet* of "the little one that had the baby." The child's present nurse, however—its grandmother—appeared anxious to do all in her power to save the helpless infant's life. Calling to mind just at the moment the fact that young calves and lambs were frequently reared upon cocoa, with very small additions of milk, and reasoning on certain analogies in reference thereto, it occurred to me that it would be a far more feasible and rational experiment to try this plan with the child than to continue the use of bread and "kettle tea," or to adopt the "arrow-root" or "rusk-biscuit" and "barley-water" method, so much in use in the nurseries of even the more favoured classes. I recommended the use of cocoa, therefore, with as much milk added as could be spared from the small family allowance, which for all purposes amounted to about a pint a day.

To my great gratification the child, who took greedily to this kind of nourishment supplied from a feeding bottle, soon improved in health, gradually put up in flesh, and became a fine thriving infant. The cocoa was continued through the whole period of infancy, and he is now, at the age of five years, as fine and healthy a child as can be seen.

Shortly after my experience of this case, I happened to be consulted about the health of twins (the children of respectable parents), both of whom, but one in particular, were in a declining state of health, evidently, as it appeared to me, from an insufficient supply of proper nourishment. Calling to mind the result of cocoa feeding in the above case, I strongly recommended a trial of it here likewise. At first there appeared to be some distrust and indisposition on the part of the mother to adopt this meagre and unsophisticated sort of diet. As I did not hesitate, however, to urge with confidence its use, it at length got a fair trial, and the result justified my expectations. The twins were after a little time fed almost exclusively upon cocoa, with milk added, and now, at the age of five years, there are not perhaps two finer or healthier children in the neighborhood. In several other instances I have recommended the same mode of feeding, more especially where milk was not to be had in abundance, and uniformly with the same result. The ordinary husk or shell cocoa, though it is said to yield half its weight to boiling water, being but the refuse of the bean, and retaining in its composition lignin and other ingredients better suited, perhaps, for the lower animals, is likely to produce irritation in the intestines and diarrhoea, as I observed in one case, and therefore not to be always trusted for infant feeding. Cocoa in the natural state abounds in a number of valuable nutritious principles; in fact, in every material necessary for the growth, the development, and sustenance of the body. That this useful article has not hitherto been adopted for infant feeding is, perhaps, owing to its not being so palatable to the adult taste as tea, coffee, and other beverages, as well as to the fact that while the unsophisticated shell or husk, which is but the refuse of the bean, is poor in nutritious properties, there happen to be so many adul-

terated preparations in the market, palmed on the public as genuine cocoa under different pretentious titles.

A most useful and able *exposé* of those appeared some time ago in the *Medical Press and Circular* but there are honorable exceptions, and though, of course, it would seem invidious to name any of these to the exclusion of the rest, I may be permitted to mention Cadbury's Cocoa Essence, which is elaborated on the principle of excluding and detaching the superabundance of concrete oil or fatty matter with which cocoa abounds, is a useful preparation, and there are others equally deserving of confidence—*e. g.*, cocoatina powders, Fry's, Van Houten's, patent cocoas, &c., &c.

Besides a volatile aromatic oil, a bitter principle and a peculiar element called Theo-bromine, which resembles the theine of tea and the caffeine of coffee, but more nitrogenous in its composition than either, cocoa contains gluten, gum, starch, and other ingredients, as well as the large amount of fat alluded to, and which constitutes rather more than half its weight. This last item being far in excess of what is either palatable or easily digestible, it becomes an object with the chemist, while retaining the other valuable flesh-forming materials, to diminish in part the superabundant fat. Under this excuse, however, the most shameless adulterations have been practised. Sugar, starch, and other and inferior substances, and even animal fat, have been introduced into some of the patented compounds, articles which, however useful in their own place, are very poor substitutes for what, at least, the infant stomach more imperiously demands.

The great advantages to be derived from the employment of cocoa in the feeding of infants, especially of the poor, are obvious, for, besides its heat-producing, flesh-forming ingredients, it is cheap, simple, and readily available. A teaspoonful, more or less, of a sound preparation of cocoa to half-a-pint of fluid, partly water and partly milk, even skimmed milk, when boiled for a minute or two, affords a wholesome meal to a hungry infant, and will *cæteris paribus* be thoroughly digested.

To present nutriment to the infant stomach, especially before the teeth are developed, in a perfectly fluid form, I have long since regarded as indispensable to the health of the child, inasmuch as the pepsin or solvent principle does not, as in adults, seem capable of reducing solids, not even p<sub>yp</sub>, to such a state of solution that the lacteals or absorbent veins can act upon it with the same energy as in after life. The consequence is, that the child, though largely fed is still hungry, accumulations take place in the intestines, its limbs and body waste as much from inanition as from vitiated secretions, and the countenance assumes the canine ravenous expression of starvation and bad treatment.

I beg, therefore, respectfully to commend cocoa, as an article of infant's food, to the notice of my professional brethren, especially those who, holding office under the Poor-laws, have such large and extensive opportunities of testing its value.

With the present pampered and artificial tastes of the better classes, it is to be feared that so simple and unsophisticated an article of diet as cocoa would be received by them with small favour for their infants; but as its nutritious properties are unquestionable, it will, I submit, be an experiment devoid of all risk, in the case of children that are not thriving under more ordinary methods of feeding, to give it a fair trial, premising that some gentle aperient will in such cases be often found a necessary preliminary, to clear out the *primæ viæ* of half-digested food previously given.

The extreme richness of cocoa in the natural state, and its peculiar flavor, which (to the adult taste at least) lacks the agreeable *bouquet* and pungency of tea, seem at first sight objections to its use; but the infant palate can readily be brought to relish that which sustains and nourishes the body. There will always be room, however, for the exercise of sound judgment in selecting, adapting, and modifying, according to the requirements of different cases respectively, the most suitable preparations of this useful aliment.

The shell or husk, though comparatively poor in nutritious properties, will yet, if fresh and pure, yield a decoction which (owing to the absence of fat) may be tolerated when the richer patent extracts disagree. Such cases, however, are exceptional, and after a little time those preparations which contain a much larger amount of absolute nourishment may be substituted with advantage.

The terrible disclosures which have recently come to light on infant mortality, especially in public institutions, invest the subject of infant feeding in reference thereto with peculiar interest.

Our French neighbours appear to have taken the matter up with their usual enthusiasm, and to have appointed a Commission of five members to conduct experiments on the most approved scientific principles with the view of arriving at certain determined practical results in reference to artificial feeding.

Now, assuming all other circumstances to be equal, and other hygienic arrangements as perfect as possible, 'due attention being paid to proper ventilation, to good drainage, to pure air, the avoidance of over-crowding, and the securing of constant watchfulness and diligence on the part of skilled nurses, the question remains still to be determined what is the best mode of infant feeding when suitable wet nurses cannot be procured.

There are some two or three leading principles which it is the object of this paper to establish—viz. :—

1. That aliments should always be presented to the infant stomach in a perfectly fluid form.

2. That as bread and farinaceous substances generally have been proved by experience, and recently by numerous *post-mortem* examinations (a) to be often indigestible, and to have led directly to infant mortality, such substances had better be excluded from infant feeding.

(a) Made by Dr. Korawin at the Children's Clinique, St. Petersburg.

3. That cows' or goats' milk, when pure and modified as much as possible to resemble human milk, will often be found sufficient without any other help to nourish the new-born infant.

4. That as cocoa contains all the elements indispensable for the growth and development of the body, and can always be presented in a fluid form, it is, next to milk, preferable to all other natural substances as an article for infant aliment.

There is one other point which, though only indirectly connected with infant feeding, is one of paramount importance as regards the present and future health of the individual—viz., the necessity of guarding against the hateful practice of covering the child's face as it sleeps.

The mistaken kindness and over-zealous attention of nurses in excluding the pure air of heaven from entering the lungs in order to guard against the effects of cold, will often be exhibited in the soft, pale, flabby condition of the infant's body, while a cachectic condition of the blood will be insidiously generated which must prevent the infant thriving for the present, and possibly may lay the foundation of tubercular and other diseases in after life.—*Dublin Medical Press.*

#### A CASE OF PLACENTA PRÆVIA.

By W. L. RICHARDSON, M.D.

Mrs. H. H., aged twenty-seven, the mother of two children. Both previous confinements, which had been in the western part of New York, were normal. Her last child was born April 13, 1874. The catamenia returned the following August. Her second child was weaned in December. The catamenia continued regular until April 27, 1876, when they appeared for the last time, and ceased on the 2nd of May. She quickened about the middle of September.

I first saw her November 26th. Her general health had been, as usual, good since the beginning of the pregnancy. The evening before, while attempting to move a piano, she felt that she "had strained herself." On getting up the following morning she discovered some blood upon her night-dress, and found that she was flowing. Supposing that it was a case of threatened miscarriage, I directed her to remain in bed and to send for me at once if there should be any increase in the amount of the flowing, or if she should suffer any pains, from which she had thus far been free. In the evening the flowing had almost entirely ceased, and she complained of no pain. A rest in bed for a few days was advised. I was again sent for December 23rd, on account of a slight bloody vaginal discharge. As there was apparently no cause for a return of the flowing, a case of placenta prævia was suspected, and a vaginal examination asked for. So much objection, however, was made to this that it was not insisted upon, and rest, as before, was ordered. January 19th I was sent for in great haste, as there had been a sudden and somewhat profuse hemorrhage. A vaginal examination showed the case was,

as had been suspected, one of placenta prævia. The implantation of the placenta was lateral, extending two or three inches to the right and about an inch and a half to the left of the os uteri. There were no signs of labor. The os was closed. The cervix was not wholly obliterated. The fetal heart was distinctly heard, beating at the rate of 130, in the normal position. The patient was seen occasionally from that time until February 2nd, when a hemorrhage summoned me to the house about 9.30 p.m. The patient was in bed, complaining of feeble labor pains, which occurred about every twenty minutes. There was some slight flowing. The os was soft, dilatable, and about the size of a cent. The presentation was normal. A colpeurynter was introduced into the vagina. At eleven o'clock the pains occurring every ten minutes, the colpeurynter was removed, together with a clot which had formed behind it. The os uteri was a little more than half dilated. The membranes were unruptured. The pains were good, both in character and frequency. Introducing the right hand the placenta was carefully separated from its attachments upon the left side, and, having been drawn down through the dilatable os uteri, was folded over upon the right side of the os. The separation of the placenta was followed by a slight hemorrhage. The membranes, which had been drawn down with the placenta, were then ruptured with the index finger, while the thumb held the free edge of the placenta in its retroverted position. There was a free gush of the liquor amnii, in the midst of which, unfortunately, the funis was prolapsed. The pains at once increased in frequency and severity, the head descending through the superior strait. The funis was pushed into the left posterior quarter of the pelvic brim, where it would be least exposed to pressure. The os dilated rapidly, and at 12.30, as I was unwilling to run any risk of a subsequent pressure on the funis, the forceps were applied and the patient was delivered of a girl weighing six and a half pounds. The uterus contracted well, and the placenta was found immediately afterwards lying detached in the upper part of the vagina. The patient had a normal convalescence.

The method of delivery adopted in this case was that taught in Vienna and recently described and brought to the attention of the profession in this country by Dr. Davis of Wilkesbarre, Pennsylvania.

In two other cases, in which I have followed the same method, the result has been successful to both mother and child. In this case, however, the prolapse of the cord was an unexpected complication, but it was an accident liable to occur in all cases where there is an excess of liquor amnii, or where, for any reason, the presenting part of the child does not lie immediately above the dilating os uteri. This complication of the case, however, could be avoided by rupturing the membranes by means of a catheter introduced high up between the membranes and the uterine wall, on the side from which the placenta has been detached. In this way there can be no danger of any such sudden escape of the waters as is likely to follow a rupture made at the dependent

part of the amniotic sac. In all cases, where an examination shows a considerable amount of water in advance of the presenting part, it is safer to rupture the membranes in this way, since otherwise there is always liability to a prolapse of the cord, and especially is this likely to happen, when the case is one of placenta prævia, in which the cord is so apt to lie at the lower part of the uterus and in the position most favorable to the prolapse.

With this slight modification of the above method of treating placenta prævia, it would seem as though the method described by Dr. Davis, and followed in this case, was by far the safest of all which have heretofore been recommended by obstetricians for the treatment of this class of cases. The danger to the child is to a great degree avoided, since there can be no fatal hemorrhage while the retroverted portion of the placenta is kept firmly pressed against the opposing uterine wall; and the danger of a maternal hemorrhage is reduced to a minimum, since the rupture of the liquor amnii prevents the substitute of an unsuspected internal for an external hemorrhage, while at the same time it hastens the completion of the delivery by the promotion of uterine contractions. Should, however, severe external hemorrhage take place, the application of forceps will in all cases at once speedily terminate the case.—*The Boston Med. and Surg. Journal*, March 8, 1877.

#### ON THE MODERN NEGLECT OF CALOMEL IN CERTAIN DISORDERS.

By Dr. DYCE DUCKWORTH, Assistant-Physician to St. Bartholomew's Hospital, etc.

What I now desire to call attention to is the neglect of mercurial medication in many so-called "functional" derangements of the body. And, as being uppermost in my thoughts, I mention first, as an instance which calls for this treatment, cases of acute gastric catarrh, the condition described by French writers as *embarras gastrique* and but too well known in all ranks of English life as "biliousness." As an accompaniment of many constitutional ailments, of acute inflammations, the continued fevers, the exanthemata and rheumatic fever, it is commonly enough met with, while as a result of intemperance in food and strong liquors it is even more familiarly known. But the frequency of its occurrence in children, not always as a result of over-eating, but often ensuing, I believe, upon check to the functions of the skin from improper exposure and insufficient clothing, is not fully appreciated. In these cases there is sometimes a remarkable degree of pyrexia present at some periods of the day, and several *pseudo-prodromata* of enteric fever may be noted. Indeed this catarrhal fever really constitutes a large part of the early trouble in many cases of the latter disorder. The same condition is likewise very common during active periods of dentition, when the catarrh is often more distinctly appreciable as a flux from the nasal or bronchial membranes, and may be,



and often is mistaken for the ordinary effects of cold.

In this catarrhal condition, it was formerly, much more than now, the practice to employ either emetics or a mercurial purge. The former have almost entirely gone out of fashion, and I imagine it will be difficult to reintroduce this plan of treatment, despite Dr. Burton's recent plea for it in this journal; but the use of mercurial preparations is free from objection so far as treatment *jucunde* is concerned. Strong prejudice is met with sometimes among classes of patients who can descry the word "*hydrargyrum*" in their prescriptions, and its presence is held to savor somewhat of violent and effete practice, and of unwarrantable undermining of the constitution.

It is in response to some such feeling and objections as these that many practitioners hailed with satisfaction the advent of such a drug as podophyllin, which gained for itself, somewhat unwarrantably, as I believe, the name of "vegetable mercury." This drug, which is uncertain in its action and often productive of griping, even when guarded with henbane and given with other aperients, generally requires to be repeated, and in this way time is lost, and the results are often far from being so beneficial as those which follow the action of a grain or two of calomel.

Let it be noted in passing that many of the popular so called "antibilious" pills notoriously contain mercury as an ingredient, notwithstanding impudent statements to the contrary on the pill-box labels.

It cannot, I think, be doubted that calomel, either alone or in combination with jalap, colocynth, or scammony, constitutes one of the most certain and efficacious purgatives, clearing the entire portal system, producing a large flow of bile in the motions (though not manifestly acting as a strict cholagogue from the liver), and affording a measure of relief to the body unattainable by any other means.

To secure this result is a leading principle in the conduct of the catarrhal state above described. And besides this condition, I would adduce the cases of acute gout and of gouty dyspepsia, which are eminently well treated by calomel at the outset; so, too, many of the recurring congestive troubles of chronic cardiac and pulmonary disease are amenable to the same medication, care being taken to withhold the drug in cases where there is manifest renal degeneration, since, as is well known, mercury is ill borne under these circumstances, and may be mischievous.

Undesirable results would follow if mercury was frequently given in such cases as I have enumerated; but I only allude to the practice of employing it at the outset, and then it should be given boldly in doses of from one to five grains over night, once for all. In adults a draught may be given on the following morning, containing any suitable saline aperient, such as sulphate of magnesia or Carlsbad salt. This plan leads the way to a simpler or more specific course of treatment in any given case. I am satisfied that in many minor disorders of children nothing can take the place of calomel as a purgative, and much time is often lost by beginning with drugs that are accounted more simple. The only medicine

that appears to me to approach calomel in value is castor oil; but this is constantly a source of trouble from its disgusting character.

I find that calomel is distinctly preferable to grey powder as a purgative, just as for other purposes strychnia is to milder preparations of *nux vomica*. Its action is smarter and more decided. It has also the great merits of being tasteless, and of exciting no nausea, and its bulk is small.

In strumous children, or in healthy ones who suffer occasionally from gastric catarrh, with tenderness and some timidity of the liver, no medicine is comparable to a purgative containing calomel. After its action a copious bilious stool or two is passed, the tongue is observed to become cleaner, the feverishness pertaining to this state subsides, and the child becomes brighter, and has restored appetite. A so-called simpler treatment with soda or citrate of potash will often fail to yield these results, and so too will repeated doses of rhubarb and senna. The constant failure of "nursery remedies" in these cases must have forced itself upon the minds of most practitioners, and, truly, by the time medical advice is sought the time for the administration of calomel has fully arrived.

I shall not dilate further upon the virtues of this drug in connection with gastric disorders, but may mention that calomel is sometimes of value in cases of chronic catarrh, when given as in an acute case; and in cases of peritonitis with severe vomiting, small doses appear to exert some sedative action upon the intestinal tract.

I would not be understood to urge a return to the old custom of a large and frequent dosing with calomel. Nothing could be worse. All drugging is an evil; but when medicine is distinctly indicated we should not fear to use active agents boldly, and so as to produce their effects.

Many hard things have been said about the improper use of mercury, but instances are not far to seek in the practice of most experienced men where aperient mercurial medicine has been taken almost nightly for years without its being possible in common honesty to say that any serious harm had thereby accrued to the individual. The habit is of course a very bad one, but it may be easily broken. In one case I succeeded by giving bread pills, and in due time declared the fraud to the patient, who had henceforth full confidence in his peristaltic powers.

I venture then to close these remarks with a repetition of the statement I made at the outset, viz., that calomel appears to me to have fallen into unmerited disuse in many disorders, and I desire to put in a plea for the restoration of this drug to a larger sphere of operation, and I am confident that such practice will not only be for the benefit of sufferers, but also for the increased credit of medical art.—*Practitioner.*

#### EXTIRPATION OF THE RECTUM.

A case of malignant disease of the rectum has recently been treated in Mr. James R. Wood's service.



by extirpation. The patient was a woman aged thirty-four. The first symptoms of the disease occurred eighteen months ago, when she noticed that defecation was accompanied by pain and slight hemorrhage. On admission to hospital a hard mass was discovered, which embraced the sphincter ani, and extended up the rectum for an inch and a half. It was decided to remove the mass, and for this purpose a circular incision was made around the anus and beyond the growth, and then by means of the scissors the tumor was enucleated. After this was done, the rectum was drawn down without difficulty, and fastened by means of sutures to the skin at the anus. Very slight hemorrhage followed the operation.—*Ibid.*

#### SOMETHING NEW IN THERAPEUTICS.

The London correspondent of the *Philadelphia Medical Times*, writing under date of April 26th, says:—

We seem to be far from having reached the end of the therapeutic art; indeed, it would appear that we are but on the threshold of a new line of inquiry of a startling character. A telegram in the *Daily News* in Easter week briefly stated that a number of medical gentlemen had waited upon a M. Burg, in Paris, to witness the effects of the application of metals to the external surface of the body. M. Charcot, with a number of eminent confrères, and Prof. Ferrier and Mr. Ernest Hart, witnessed M. Burg's novel measures. These consist of the application of a band of disks of metal to the skin of certain patients. These patients were affected with semi-anæsthesia, and there was not only loss of sensation upon one side, but there was also a fall of temperature. M. Charcot passed long needles right through the thigh, the cheek, and down the web of the fingers of the affected side, and twisted the needle about most effectually without the slightest evidence of sensation being produced. In addition to this, there was no bleeding from the orifices. The test was very thorough, and was applied to some new patients as well as those who had been some time under care. After this belts of disks of various metals were applied to the patients for a quarter of an hour, when a total change was found to have been induced. The slightest prick of the needle not only elicited evidences of acute sensation, but the pricks bled readily, and the temperature rose. The results were only brought about when the proper metal for each patient had been applied. Thus, in one iron disks would induce the change; in another copper disks; while in others silver, platinum, or gold disks were required; one metal alone having this curious power over each patient. The possibility of the whole thing being merely an hysterical affair was negatived by the nature of the experiments made. If the metal disks were covered on the side applied to the skin with a thin covering of wax, out of the patient's sight, so that there could be no collusion, no effects were produced, demonstrating that the effects are not the mere result of imagination. The most curious and inexplicable part of the whole affair

has yet to come. After these metal belts had been wound round the limbs of the affected side, and that side had been restored to its normal condition, the anæsthesia passed over to what had been before the sound side. Needles could be passed into the tissues without eliciting pain or drawing blood just as was the case before with the affected side. The whole thing appears incredible if it were not supported by the testimony of persons of unimpeachable veracity, who themselves admit that they are not provided with any hypothesis to explain these extraordinary phenomena. A commission has been appointed in Paris to thoroughly investigate the whole subject, and to subject the patients to every possible test, in order to establish or explode the matter. For many years M. Burg has been regarded as an object of suspicion as to the reality of his experiments and the bona fides of his operations, but at last the matter is to be cleared up. The practical value of thus finding out the metal to which a patient is susceptible is that it furnishes a clue to the internal administration of remedies. For instance, M. Burg had a patient suffering from persistent aneurism where the administration of iron was of no avail. By means of the application of these belts of disks it was ascertained that gold was the metal for which this patient had an elective affinity, as it were, and the administration of gold internally soon led to a perfect cure. If these observations be corroborated and confirmed, even the most recent treatises on therapeutics will have to be rewritten, and our therapeutic measures in many respects simply revolutionized. The progress of the inquiry instituted by this commission will be watched with the keenest attention by the whole of the profession.

#### BROMIDE OF ARSENIC IN THE TREATMENT OF EPILEPSY.

Dr. Th. Clemens, of Frankfort-on-the-Main, has employed bromide of arsenic for twenty years in the treatment of diseases of the nervous system, and especially of epilepsy, and claims that he has obtained astonishing results with it. He uses the liquor arsenic, bromat., and gives one or two drops in a glass of water once, or, if necessary, twice daily. These minute doses may be given for months, even years, without producing the usual unpleasant effects of a long continued arsenical course. All his cases of epilepsy have been markedly relieved and improved by this remedy, but in only two cases has it produced a complete cure. In many cases of incurable epilepsy, complicated with idiocy and deformities of the skull, the fits were reduced in number from twenty in the twenty-four hours, to four or even two, a result that has been obtained by no other treatment. In connection with the bromide of arsenic, an almost exclusively meat diet is advised. The patients should be as much as possible in the open air in the daytime, and their windows be kept open at night. Unlike bromide of potassium, this remedy does not require to be given in increasing doses, and instead of interfering with digestion, improves the nutrition and strength. Dr.

Clements has employed the following formula since 1859, and thinks that it ought to replace Fowler's solution, which is irrational in its composition and uncertain in its action. This solution becomes stronger with time; the chemical union of the bromide with the arseniate of potash becoming more and more perfect.—℞ Pulv. Arsenic. alb. Potassa. carb. c. tartar., aa dr. i.; coque cum aqua destil. lb. ss. ad solut. perfect.; adde, aq. evaporat. restituta, aquæ distil. oz. xij., dein adde brom. pur. dr. ij., refrigerat. stet per sufficient. temp. ad. decol., S. liq. arsenic. bromat.—*Allg. Med. Central Zeitung*, May 24th.

#### ON DYSPEPSIA.

At a late meeting of the Harveian Society of London, Dr. Farquharson read a paper on this subject.

Attention was directed to the state of the tongue in dyspepsia. A deeply fissured tongue often meant little: whereas a thin white fur, composed of minute dots, was generally found along with pain immediately after food. Pain after a longer interval was accompanied by a pale, flabby tongue, with reddish tip and centre. The treatment of dyspepsia consisted of two parts, that of food and that of drugs. The latter was the principal part with patients applying for gratuitous relief. The pain occurring immediately after food was usually relieved by alkalis; whereas acids were indicated where suffering was not experienced until an hour or two after the commencement of the digestive act. For the relief of the nausea and sickness remaining after the bowels were thoroughly cleansed, nothing was so effectual as hourly drop-doses of ipecacuanha wine. Nuxvomica was also a valuable remedy. Pain might be but the protest of the stomach against an overload, or be the result of deficient tone, from general nervous exhaustion. In some cases each meal was followed by diarrhoea; and for these cases attention was directed to Ringer's plan of minute doses of the liquor hydrargyri perchloridi. In speaking of diet, Dr. Farquharson pointed out that there are three forms of dyspepsia; 1. The dyspepsia of fluids, as it is called, where the stomach seems intolerant of all forms of fluid; 2. The digestive derangements following intemperance in the matter of animal food; and, 3. The dyspepsia connected with indulgence in tea, or other warm and weak infusions of tannin.—*Philadelphia Reporter*.

#### CYANIDE OF MERCURY IN DIPHThERIA.

Dr. A. Erichsen (*St. Petersburg Med. Woch.*, April 14), on the strength of twenty-five cases in which he has tried it, strongly recommends minute doses of cyanide of mercury (*hydrargyrum cyanatum*) in diphtheria. He believes in the efficacy of mercury abridging the duration

of the diphtheritic process, while he knows of no other preparation except this which does not quickly disturb digestion and nutrition. Given in small doses, it scarcely disturbs the alimentary canal at all, even when continued for a long time. Indeed, syphilitic children from a year old may be treated for weeks without any such disturbance occurring, if it be given in doses of one-forty-eighth of a grain thrice daily. In diphtheritis Dr. Erichsen has used it at various ages—from seven months to fourteen years, as well as in adults—and in all the cases it was well borne. In a short time the membranes became thinner and less adhesive, so that even where they had spread into the larynx and induced obstruction, with cyanotic colouring of the face, they still separated and rendered the larynx free again. This was the case in three of the instances occurring in young children, the symptoms which seemed to threaten death or to require tracheotomy yielding to the internal use of the cyanide and the local application of hot sponges. This mode of treatment has also the advantage of rendering the necessity of local applications to the fauces much less frequent; and penciling the parts with tincture of iodine twice a day suffices, instead of the constant applications, which are so irksome. The dose varies with the age, children to their third year requiring only one-ninety-sixth of a grain, and older children and adults one-forty-eighth of a grain every hour during the day and every two hours during the night. The following is the formula employed: Hydrarg. cyan. gr. j. aq. destill. ʒvj. syr. simpl. ʒss; half or a whole teaspoonful every hour. Most of these twenty-five cases were children from the third to the fourth year of age, in whom the prognosis is not so favourable as in older children and in adults. Of the twenty-five only three proved fatal—one from paralysis of the heart, a second from suppurating parotiditis, and the other from coinciding meningitis; but in all the cases—even in the fatal ones—the diphtheritic process was arrested.—*Med. Times and Gaz.*, April 28, 1877.

#### TREATMENT OF LUMBAGO.

The treatment of lumbago should be manipulation applied to the lumbar region of the spine, so as to restore mobility. To subdue the painful condition of the muscle, injections of  $\frac{1}{8}$  of a grain of atropia and  $\frac{1}{8}$  of a grain of morphia, well diluted, should be made well into the body of the muscle. [This is the usual treatment of local rheumatism at this hospital, and it has been followed in all cases with most gratifying results.] Great care must always be had in the administration of morphia and atropia to nursing-women, as belladonna is the most powerful antilactagogue known, and two large doses of morphia not infrequently affect the child through its milk. As regards other methods of treatment, the

local application of blisters, iodine, and croton oil, together with the internal administration of the iodide of potassium, will often do good.—*Prof. Pepper in New York Medical Record.*

#### OFFICE PRACTICE.

The Philadelphia correspondent of the *Boston Medical Journal* writes: "Some of us have this week been newly taught a lesson not to be easily forgotten. I was one of the victims. A colored man came to my office with the request that I would visit a lady who was ill. I agreed to go at a certain hour. At that hour I was detained by office patients. The man came again to request me to hasten. I went soon after to the house to which he had directed me. No such lady as the man had named was known at this house, and I learned that I was the fourth physician who had called upon a similar errand. Returning to my office in a frame of mind common to dyspeptics, I was told that shortly after I went out the man had come a third time, saying that he had met me, and that I had sent him to my office to await my return, which would be in half an hour. The servant, deceived by his plausible manner, admitted him. His stay was very brief. He took property to the value of three hundred and fifty dollars. I went at once to our detective police, described the property, and the officers vindicated the high reputation of Mayor Stokely's police system by placing three hundred dollars' worth of the stolen articles in my possession within fifteen hours. The thief had made use of a pawnbroker, in whose shop the recovered property was found. Other physicians have been likewise victimized, but to what extent I do not know. This is a common form of thieving in Philadelphia, so that the stringent rule of doctors' houses is that not a soul, even though he be a bishop, shall be admitted to the office during the absence of the physician, unless the servant keeps guard."

#### QUININE IN THE TREATMENT OF FISSURES OF THE NIPPLE.

Obstetric practitioners are much more in the habit of using quinine after child-birth than they were formerly, but we scarcely expected to hear that this agent would be found useful in the treatment of an affection which has always been regarded as more amenable to local than to constitutional remedies. Dr. Le Diberder, however, chief physician to the Lorient Hospital, is of opinion that the frequent failure of local treatment arises from the fact that this affection is only a manifestation of general disorder of the system. He says that the appearance of the fissures is soon followed by a general febrile state, of an intermittent nature, and during which the local affection is very likely to pass into engorgement of the breast, and even abscess. Accordingly, he thinks quinine will prove to be of the greatest service in those cases; and dur-

ing a long experience of it he has always found that a cure was effected in from three to five days. He generally prescribed a dose of six grains early in the morning, and a similar dose about eleven o'clock a.m. Local treatment was considered of secondary importance, being confined chiefly to poultices and some simple wash or salve.—*Dublin Medical Press.*

#### LOTIONS FOR URTICARIA.

Prof. Hardy recommends (*Union Méd.*, May 20) the following lotion, to be applied several times a day in order to allay the itching in urticaria: chloroform ten, and oil of sweet almonds thirty parts. In obstinate cases he prescribes corrosive sublimate, one-tenth to one-seventh of a part; alcohol, ten parts; and distilled water, ninety parts. He gives also internally alkaline medicines, and if these do not prove efficacious he resorts to arsenic.—*Med. Times and Gazette.*

#### ANEURISM TREATED WITH TAN POULTICES.

In the *London Medical Times and Gazette*, November 4th, Dr. W. Arding writes:—

As the medical treatment of aneurism, has only partially, if at all, engaged the attention of medical practitioners, I beg to bring to your notice a case of such disease treated by me some years ago.

The patient, J. S., of middle age, was affected with difficulty of breathing, particularly when at his work as a shoemaker, and at the same time was affected with a pulsating tumor in the epigastric region, at the scrobiculus cordis, quite evident to the sight. His general health was good in all other respects. After applying somatopical remedies without any improvement, at last I suggested the application of tan poultices to the pit of the stomach. In a few weeks the disease apparently was perfectly cured, but I lost sight of my patient, he having left this town for Reading; since which time no further accounts have been received of him.

The rationale of the treatment must appear, I am happy to say, evident to every one; an astringent application, externally applied, having successfully produced a deposition of fibrin internally in the diseased artery, so as to almost astonish me with its favorable result.

#### BROMOHYDRIC ACID.

By Dr. J. MILNER FOTHERGILL, Assistant Physician to the West London Hospital, &c.

The utility of the bromide of potassium is now generally acknowledged by the profession, and its effects upon the nervous system are often of the greatest service. At the same time, it is not readily combined with several agents with which it may be advantageously administered, as quinine, for instance. Last year, I abstracted from the *London*

*Medical Record* (April 20th, 1875), a paper by Dr. De Witt C. Wade on this agent, which appeared in the *Peninsular Journal of Medicine* in February 1875. He described there the usefulness of bromohydric acid, especially in obviating the headache which is produced in some persons by quinine. From what he said, I handed over his paper to the dispenser of the West London Hospital, and commenced to prescribe the new remedial agent. The formula is as follows, for the production of the acid in quantities of two quarts. Dissolve 3 x, 3 vi, gr. xxviii of bromide of potassium in four pints of water, then add 3 xiii, 3 i. g. xxxvii of tartaric acid. The bitartrate of potash is precipitated, and the hydrobromic acid remains in a clear bright, almost colourless fluid, possessing an acid taste and the ordinary acid properties, as well as the peculiar properties of bromide of potassium, as compared with any other salt of potash.

The accuracy of this last statement may be challenged by some readers. I will, therefore, briefly relate the conclusions arrived at after a twelve months' experience of the drug. It certainly does prevent the occurrence of headache, after each dose of quinine, in those who before had to desist from taking quinine for that reason. It is, perhaps, not invariably successful, but its power is very marked. It also prevents the fulness felt in the head by some persons, especially those labouring under cerebral anæmia, after doses of iron. It is also useful in nervous conditions, and, with quinine, is excellent in those cases where there is much nervous exhaustion from excessive indulgence in tea or in alcohol; this being tried in a case of nervous excitability and sleeplessness, where there had been much resort to chlorohydrate.

In forms of excited action of the heart, connected with general nervous excitability or nervous exhaustion, hydrobromic acid is most useful. Given with quinine (of which it is a capital solvent) and digitalis, it gives better results than the bromide of potassium and digitalis; this is a favourite combination with me at both my hospitals, and is agreeable as well as effective. In all hysterical conditions connected with ovarian excitement, it seems to have all the properties of the bromide of potassium. It is equally useful in the vomiting of pregnancy, and seems to exercise quite as powerful an influence over acts of reflex origin as does the bromide. It is especially adapted for the relief of menorrhagia associated with sexual excitement, and is even more effective here than the bromides themselves. It is also of use in whooping-cough, and combines conveniently with quinine, forming an effective measure in this troublesome affection. With spirit of chloroform and syrup of squills, it forms a most agreeable and palatable cough mixture of no mean potency. It is also of use in case of cough of reflex origin. Where there is gastric irritability, it is the most useful of all acids, possessing the usual properties of acids generally and of the bromine as well.

The dose of the acid, prepared as above, is one drachm as a full dose. Half a drachm is the dose

I ordinarily employ. Bromohydric acid has the further advantage of not producing the troublesome eruption so often the result of doses of the bromide of potassium, at least so far as my experience has yet extended. There are many qualities about this acid to render it an useful member in our therapeutical armamentarium.

Dr. Wade states that it is useful in the treatment of fever. It would seem the acid *par excellence* where there is much cerebral excitement pyreintic affections, but of this I have no personal experience. —*British Med. Jour.*, July 8, 1876, p. 42.

#### HYPODERMIC INJECTIONS IN HERNIA.

Reporting upon three cases communicated to the Société de Chirurgie, in which strangulated inguinal hernia was easily reduced after the hypodermic injection of morphia, M. Le Den tu observes that in these cases the strangulation was recent; and although the injections certainly assisted their reduction, it is doubtful how far they would have succeeded had the strangulation been more decided and of longer duration. If the surgeon is called to the case immediately, the injection may be of use by dissipating the pain and spasm; but if some hours have elapsed, it will be always of less value than chloroform, which enables us to at once recognize whether the hernia is reducible or the operation necessary. —*Medical Times and Gazette*.

#### NIGHT CRIES AND NIGHT STARTINGS OF CHILDREN.

Caspari attributes them to frightful dreams. In children under a year old, and especially in delicate, anæmic children, they are associated with mild or severe convulsions. He uses as a specific bromide of potassium, and according to the age gives 0.5 grmm. to 1.5 grmm. (gr. 7½ to gr. 23½) a day. (Gr. xxv potas. brom., aq. 3jss; 3j four times a day.) According to Edlén's experience, bromide of potassium always causes quiet and peaceful sleep in young children, but does not act so well in older ones. It acts well in convulsions, teething, and meningitis. He gives a strong six-months-old child 0.5 grmm. (7½ grains) three or four times a day, or once or twice in the evening. Younger and less robust ones he gives 0.25 grmm. as a dose. In older children he often increases the dose to 0.75 grmm. several times a day. —*Schmidt's Fachbucher*.

#### NOCTURNAL CRAMP.

A member writes: "I am very glad to find that J. E. C., M.D., has found some benefit from Howard's bicarbonate of soda. He has lain many nights studying cramp in his own person. It proceeds, he says, from excessive acidity, not only of the stomach, but of the whole bowel tract; and when it seems to have reached its

height the extensor tendons have nearly dislocated the great toe. Then it is that relief is at once obtained by taking half a drachm to two drachms of the soda. Before he found this remedy useful many things had been tried. In less than thirty seconds the cramp disappears, leaving a soreness that soon passes away. It has been prescribed by him in numerous cases, and the result has been always satisfactory.—*Brit. Med. Jour.*

#### TO RELIEVE MORBID THIRST FOR ALCOHOLIC DRINK.

S. B. Merkel, M.D., of Philadelphia, writes to the *Journal of Materia Medica* as follows:

"A tonic and stimulant which partially supplies the place of the accustomed liquor, and prevents the absolute moral and physical prostration that follows a sudden breaking off from the habitual use of stimulating drinks:

R Peppermint water..... 3 xij;  
Sulphate of Iron..... gr. v;  
Spirits of nutmeg..... 3 ij;  
Valerianate of quinia..... gr. ijss.

S. Teaspoonful taken as often as the desire for strong drink returns. I have had frequent occasion to test its efficacy in many cases in my practice, and have found it uniformly successful."

#### SIMPLE MODE OF CHECKING EPISTAXIS.

The *Tribune Médicale* say that even after plugging the nares, injection of perchloride of iron, etc., have failed, an emetic, given to the extent of producing vomiting, will permanently check epistaxis.

#### TREATMENT OF CARBUNCLE.

By J. H. DIBRELL, JR., M.D.

By the use of carbolic acid and collodion good results are secured. They can be used in any stage of the disorder. D. tells us how he used these agents:—

My plan is as follows:—When the carbuncle is seen early, to puncture it, and with a camel's hair pencil, or small pointed stick, introduce into the opening thus made the pure and undiluted acid. If the disease has made greater progress, and one or more small acne-like pustules have made their appearance on the tumor, these are carefully opened, which can be done without causing pain, and the acid introduced at each opening, as before indicated. The effect of the acid when first applied, especially if it touch a denuded surface, is to produce a sharp stinging pain, which is, however, of but momentary duration. The next effect is local anæsthesia, and the patient is, for a time, perhaps hours, free from pain.

Carbolic acid possessing in a notable degree anæsthetic, antiseptic and caustic properties,

would seem to be peculiarly adapted to the treatment of the disease under consideration, which is usually attended with great pain, sloughing, and an intolerable odor. Its use in my hands has certainly seemed to diminish the pain, correct the odor and to arrest the sloughing process with much promptitude.

After the acid had been applied, collodion should be several times painted over the carbuncle, and beyond it, a few lines, on the uninflamed skin. *All the openings are to be left free*, in order to give egress to discharges. Each layer or film of the collodion should be allowed to dry before another is put on. This dressing may be renewed once daily, and the collodion previously applied, if partially detached, should be peeled off before a new application is made. If the part on which the carbuncle makes its appearance be covered with hair, this should be cleanly shaved off, otherwise the collodion will be difficult to remove, and at the same time cause considerable pain.

It is interesting to watch the collodion as it contracts upon the diseased tissues. The skin, previously red and swollen, will in a few minutes be seen, through transparent gun cotton, to have become pale and depressed, as the pressure gradually empties the engorged capillaries. If the disease is advanced, and slough have become partly separated, they are not unfrequently forced out, or brought so near the opening as to be readily detached with scissors. This pressure does not give rise to pain, but, on the contrary, generally affords much relief to the suffering patient. The application of collodion in this disease has other advantages. It limits the extent of the disease in decreasing the vascularity of the part, and in this way lessens the inflammatory action going on, and probably also prevents the absorption of pus. It also protects the surrounding skin from contact with discharges, which, as is well known, are capable of producing, if not an extension of the disease, numerous small boils, which are of themselves an exceedingly annoying complication. Should, however, any such pustules or boils be formed in the course of the disease, they can be cut short by touching them with carbolic acid. After the carbuncle has been treated with the acid and collodion, it should be protected from contact with the clothing, by covering it over with a piece of old linen or cotton cloth, saturated with sweet oil, or spread with carbolic acid cerate.—*Phil. Med. and Surg. Reporter.*

#### ON THE RADICAL TREATMENT OF UTERINE CANCER.

Prof. Goodell, of the University of Pennsylvania, believes that it is not only often impossible but is clinically needless to distinguish *intra vitam* the various kinds of uterine cancer. He believes that cancer of the uterus is of all cancers the least prone to infect.



the system; its victims die not so much from specific systemic poisoning, and from transference to distant organs, as from septicæmia, from embolism, and from the exhaustion induced by pain, sleeplessness, and the bloody or serous fluxes. In cancer of the cervix the indications are either to eradicate the disease, or failing in this to check the excessive discharges, to correct the fœtor and to allay the pain, and thus to prolong life. To effect this he advises removal of the cervix either by the écraseur or galvanic cautery. When the entire cancerous mass is not removed by these means, the remaining outgrowths and the underlying infiltrated tissues must be dug out with the fingernails, scraped off with Simon's spoons, or snipped off with scissors. The resulting deep and funnel-shaped cavity must next be cauterized with fuming nitric acid or the hot iron. This may be done either at the time of the operation or after an interval of a week or so. During the operation, if scraping be needful, the hemorrhage is usually quite free, but in Prof. Goodell's experience it has always yielded to an injection of one part of Monsel's solution to three of water, followed by a sponge tampon lightly packed into the funnel-shaped pit. After the operation there is sharp fever for four and twenty hours or more. On the third or fourth day the discharges sometimes become offensive, and continue so for several days. After the scraping process the stench is invariably overpowering and must be met by injections of a solution of permanganate of potash, and by large doses of quinine to guard against blood-poisoning.

In all his cases Prof. Goodell enforces sexual abstinence, and orders the patients iron and bichloride of mercury as a tonic, arsenic to repress the tendency to reproduction of the new growth, and ergot to diminish the supply of blood to the uterus. He has now operated on thirteen cases, in all of which life was lengthened and made bearable; in one instance, as he believes, saved for good. The hemorrhages were stayed, the putrid discharges checked, the pains allayed, and the appetite restored, and bed-ridden patients were enabled to get up and resume their household avocations. Even when the womb was fixed by the extension of the disease to parts beyond operative reach, much was gained by removing ail of the cancer that could be reached. The complexion invariably cleared up after the operation, and this fact leads Prof. Goodell to think that the so-called cancerous cachexia is due not to a cancerous diathesis, but to absorption from a local cancerous deposit.

Injury to the peritoneum cannot always be avoided during the operation. Karl Braun, however, does not hesitate to include a portion of the peritoneum in order that the hot wire may pass through perfectly healthy tissue. He says he has repeatedly in this way opened into the peritoneal cavity without harm to the patients. In one case, while scraping with the fingernails, Prof. Goodell opened into Douglas's cul-de-sac. No vaginal injections were used, no untoward symptoms arose. — *Med. and Surg. Reporter*, March 10th.

#### AN ARISTOCRATIC TITLE.

At a most exclusive ball at the French sea-side a young druggist's clerk approached one of the fairest and most aristocratic of the ladies, and humbly solicited the favor of a quadrille. The lady inspected him critically from his tie to his boots, and, taking her card, said, "I never, monsieur, dance with people whose names are not preceded by a 'de.' What shall I inscribe Monsieur——?" "'Monsieur' Peroxide de Manganese,' mademoiselle," he replied.

#### A NEW COUGH MIXTURE.

Dr. J. M. Fothergill, of London, says that the following is "a really charming cough-mixture, efficient as well as palatable:"—

R Sp. chloroformi..... ℥ xx.  
 Acid hydrobromic..... fl. 3 ss.  
 Syr. scillæ ..... fl. 3 i.  
 Aquæ ..... ad. fl. 3 i.  
 Ter in die.

The dose, of course, is reduced for children. Any other acid in this mixture is very agreeable, but the hydrobromic acid, from the effect of bromine upon reflex mechanism, allays the cough, often so troublesome. It possesses much the same action as opium, without the ill effects upon the digestive organs or on the bronchial secretion.

PROFESSOR LISTER—After all Mr. Lister is not coming to London. Prof. Blackie has addressed to him the following:—

*To Professor Lister, on learning his determination not to leave Edinburgh for London.*

Some live to feed ambition, some for fame;  
 Others for gold; and some, the noble few,  
 For honest work achieved and service true,  
 With wage of truth and love. This last thy claim  
 And glory, Lister. When the southrons laid  
 Their golden snare for thee, and every charm  
 Of that gross-monster'd Babylon displayed  
 To lure thee from thy station for our harm,  
 Thou didst stand firm. For this my humble rhyme  
 Thee honours, and Edina gives thee place,  
 High-perched, with the prime pattern of her race,  
 Scott, Chalmers, Wilson, Hamilton and Syme,  
 And bids thee bloom on Scottish soil, and grow  
 Proudly, like stout old pines, where stiff old breezes  
 blow.

College, April 2.

JOHN STUART BLACKIE.

Since this was published, Mr. Lister has reconsidered his determination, and decided to go to London.

#### TREATMENT OF NEUROSES OF THE HEAD.

At the séance of the *Académie de Médecine*, at Paris, on October 21st, Prof. Bitot, of Bordeaux, read a memoir on the efficacy of light cauterizations of the pharyngeal mucous membrane in the treatment of certain neuroses of the head with coincident amnesia, and on the probable role of the superior cervical ganglion in these cases. The following are his conclusions:



1. The head is the seat of certain nervous troubles, the precise localization of which is not as yet settled.

2. The cranial portion of the great sympathetic must have some influence in the production of these disturbances.

3. It is rational in that case to assume that the superior cervical ganglion, which constitutes the principal centre of the sympathetic system in the head, is the point of origin of the nervous disturbance.

4. The anatomico-physiological importance of this ganglion, which is veritably the brain of the vegetative life of the head, must be borne in mind by the observer, whenever a neuroses of this region comes into question.

5. The observer must particularly bear in mind that this neuropathic condition will be rebellious to the ordinary methods of treatment.

6. The relations of this ganglion with the pharyngeal mucous membrane make the latter the point of election for the application of certain irritants that will act on the ganglion and its most distant branches.

7. The painting of this mucosa with the tincture of iodine has furnished remarkable results when the disturbances were essentially nervous. On the other hand, it had proved useless in the disturbances consecutive to apoplexy.

8. In many cases complicated with amnesia, the memory has been regained under this treatment.—*Gazette Médicale de Paris*, November 4, 1876.

#### SPINA-BIFIDA TREATED BY THE IODO-GLYCERINE SOLUTION.

Professor Morton, of Glasgow, adds another successful instance of injecting the tumor in spina-bifida with the iodo-glycerine solution. The malformation was in the lumbar region, the sac the size of an ordinary peach, and not very full. The operation was done a few weeks after birth, the method being puncture and injection of about half a drachm of the solution; very little of the serous fluid was permitted to escape. Collodion was applied to the opening over which was also placed a square inch of lint dipped in collodion, so that the wound was effectually closed. As shrinkage of the tumor was slower than anticipated, another puncture was made twelve days after the first operation, though in this case only a few drops were injected. A month later it was reported that the child was doing well, and the tumor had shrunk; and though the skin covering the centre was bluish for the breadth of a shilling, it was firm to the touch. This case is said to have been the fourteenth in which this treatment has been used, and eleven of them have been successful. Prof. Morton has found it uniformly successful in all the lumbar cases he has treated.—*Lancet*, Dec. 2, 1876.

#### A NEW METHOD OF ADMINISTERING QUININE.

By W. E. FORREST, M.D., Resident Physician, Presbyterian Hospital.

Allow me to say a few words recommending a new medicine to our already long list.

In the October number of the *American Journal of Medical Sciences* of the present year is an article by Fothergill, of London, recommending the hydrobromic acid. Among other properties he speaks of it as a solvent for quinine and a preventive of the head symptoms resulting from the use of quinine.

We had a patient in the hospital with chronic malaria, who could not take quinine for any length of time without being "almost crazy from it," as she expressed herself, and at the suggestion of Dr. Burrall, the visiting physician, we tested the acid on this case.

It was given in 3 ss. doses, with quinine in capsules, and with the happiest result. The roaring in the ears and the dizziness disappeared, and the patient no longer objected to being cured by quinine.

Since then, I have tested the medicine in many cases, and it has never failed. Dr. H., of Washington, D. C., entered the hospital suffering from malarial poisoning and from large doses of quinine, and was much pleased at being relieved from the cinchonism by the acid. The tinnitus aurium following the exhibition of quinine seems to be due to an active congestion of at least some parts, if not the whole of the brain, as Dr. D. B. St. J. Roosa has observed that after taking ten or fifteen grains of quinine the membrana tympani and malleus are markedly injected. It had before been noticed that the administration of quinine aggravated the symptoms of otitis media and other aural affections.

It may be that hydrobromic acid, being analogous to bromide of potassium, may, like bromide of potassium, cause contraction of the blood-vessels, and thus prevent the bad effects of quinine. However this may be it acts in the happiest manner.

There is a growing mistrust among the laity towards quinine. All sorts of stories are reported concerning its harmful effects, such as causing permanent deafness, impairing the eyesight, affecting the brain, etc. etc. Nor are these opinions wholly without reason, for the roaring in the ears, the dizziness, the trembling limbs, the sensation of being in a storm at sea generally, is anything but pleasant and reassuring to a person distrustful of "allopathy." It is then the duty of the profession to keep our faithfully quinine from falling into disrepute when it can be done by so simple a means as the use of this acid.

In giving quinine in solution, I use the following formula:

R. Quinine sulph ..... 3 j.  
Hydrobromic acid,  
Aque..... aa ʒ iss.

M. Sig.—Two teaspoonfuls contain five grains of quinine.

You can insert the formula for making the acid according to Fothergill, if you see fit.

Dissolve ʒ x., ʒ xj., grs. xxvii. of potassæ bromidi in water Oiv., add ʒ xiiij., ʒ i., grs. xxxvij of tartaric acid. The acid remains in solution, and potassa bitartrate is precipitated.

#### A SIMPLE MEANS OF LESSENING THE PAIN ATTENDING BLISTERS.

The practice of blistering in the treatment of acute articular rheumatism would meet with much more favour in this country if pain and, in certain cases, strangury and slight hæmaturia, were not inherent to this mode of treatment. A hypodermic injection of morphia relieves the pain, but has no effect upon the urinary troubles. To alleviate the one and prevent the other, M. Ernest Besnier proposes the following plan. Take care that the blister is applied in the early morning; those convenient ones which are covered with a sheet of oiled tissue paper will cause very little suffering, and never give rise to those vesicatory or renal troubles which are now and then so severe and painful, provided the blister be removed after a few hours, five to ten at the outside, as soon as the epidermis begins to rise slightly and partly, which we may recognize by the skin becoming pearly and irritated. The plaster must then be removed (a very few hours' application is sufficient for a child or a thin-skinned person), and its place must be supplied by a piece of blotting paper very thickly coated with cerate or cold cream. The vesication continues almost painlessly, and the blisters rise nearly as well as if the cantharides had been kept applied. The practitioner who does not disdain to attend to such minute details will gain the thanks of his patient, and more especially of those who have been previously treated by such inhuman proceedings as are common where blistering is employed.—*London Med. Record*, Feb. 15, 1877.

#### HYDROBROMATE OF QUINIA IN DISEASES OF CHILDREN.

In a communication to the *Allgemeine Medicin. Central-Zeitung* (No. 53, 1876), Dr. Steinitz, of Breslau, gives the results of his experience of the use of hydrobromate of quinia in children's diseases.

He used it in an extensively prevailing epidemic of whooping-cough, giving it generally in a mixture composed of three to five parts of the hydrobromate in one thousand of syrup; the dose being a tea-spoonful every two hours. In

no case was it necessary to use any other remedies. The whooping-cough had in twenty-three cases lasted on an average ten weeks, and in fifteen others twelve weeks, and in the use of the remedy the paroxysms became, in the course of a week, less frequent and milder. No after-effects on the alimentary canal were discovered. Three death occurred, all in very atrophic and scrofulous individuals, in whom other complications were present. Dr. Steinitz takes the opportunity of remarking that he prescribed in several cases the extract of castanea vesica, which has been extolled as a remedy, but without good results.

He also used the hydrobromate of quinia in nine cases of spasm of the glottis. Three of the patients died after only a few paroxysms. The remaining six recovered. The medicine was prescribed as stated above, and was borne well. In all the six cases the attacks diminished, at times varying from the third to the fifth week in intensity as well as in frequency; and the duration of the disease was in no case longer than from four to six months. This result is satisfactory when compared with the previous course of the disease under the use of other medicines, such as bromide of potassium, oxide of zinc, valerian, and musk, none of which could be borne for several months together.

Dr. Steinitz has also given the hydrobromate of quinia in the dental convulsions of children, but cannot as yet speak of its efficacy in this malady. He regards it, however, as deserving a trial.—*London Med. Record*, Feb. 15, 1877.

#### BELZ ON THE USE OF ICE IN CROUP.

Dr. F. Betz (*Memorabilien*, 10 Sept., 1876) recommends in cases of croup the application to the front of the neck of a bottle or bladder filled with finely powdered ice and fastened by a light bandage. When the temperature is high, salt is added. The bottle must not be allowed to remain until the ice is completely melted, but be renewed before this occurs. By this treatment, the temperature of the anterior part of the larynx and trachea is lowered, so that the process of exudation is arrested. At the same time, heat is abstracted from the air passing to the lungs through the larynx and trachea; and this acts favourably on the lungs. The ice-treatment of croup is to be regarded as the most rational, preventive and abortive plan, if its application be sufficiently early, energetic, and continued. If it be too late to subdue the formation of the false membrane, ice is of very great value during operation and in the after-treatment. The intense cold causes contraction and emptying of the vessels of the neck: so that hemorrhage gives less trouble during the operation, and the larger veins and the front of the neck are less contracted. In the after-treatment, the use of ice diminished the tendency of the operation-wound

to become diphtheritic; it also expedites healing, and keeps down swelling of the wound. After operation, pieces of guaze soaked in ice-water or laid upon pieces of ice are placed over the canula and wound, and renewed every five or ten minutes. In this way, the inspired air is cooled.

#### IODIZED PHNOEL—A NEW UTERINE ESCHAROTIC AND ALTERATIVE.

Dr. Robert Battoy (*American Practitioner*) has found this so satisfactory in his own experience, and in the reports of his gynæcological friends that he offers it as a promising addition to our armamentarium. He gives the following formula for its preparation: Iodine, one-half ounce, and crystalized carbolic acid, one ounce. Mix and combine the two by gentle heat. As an application to uterine cancer he has found it efficient and painless, when the healthy parts have been carefully protected. The applications are made upon lint or cotton, saturated with the remedy and surrounded by a cotton tampon to protect the sound parts.

In chronic afflictions of the cervix, the cervical canal and the endometrium, uterine hypertrophy and subinvolution he has found the following useful:—Iodized phenol, one and a half ounce; crystalized carbolic acid, one ounce; water, two drachms. Mix and make solution. It has been used both in its full strength and in various dilutions with glycerine; sometimes two-thirds the above strength, sometimes one-half, one-third, and even one-fourth.

It is applied by means of a bit of lint cotton securely twisted upon the end of Budd's elastic probe, which having been saturated is carried up to the os internum, and once or twice saturated. He has also wound cotton to the size of a uterine tent and saturated it with the liquid, passed it into the uterus by means of an elastic probe, and allowed it to remain there for twelve or twenty-four hours. Sometimes he has dilated the cervical canal with sponge tent and mopped out the interior of the uterus with the liquid. The applications are ordinarily made three times in the intermenstrual period, rarely oftener, sometimes but once or twice each month.

#### THE USE OF WATER TO RELIEVE PAIN.

The hypodermic use of water for relieving pain continues to afford an interesting object for experiment. The evidence in its favor could not be stronger although little attempt is made to explain to us why or how water should quiet pain. Dr. Lafitte, of Nantes, has used water subcutaneously since 1872, when he succeeded in immediately relieving pain in a woman who was suffering most acutely from lumbago. Eight grmm. of distilled water was injected, and the pain did not return. In cases of sciatica, supra-orbital and facial neuralgia, as well as in intercostal neuralgia and rheumatic affections of the joints, he has found water in-

jected subcutaneously quite as useful as morphia. Dr. Pillet speaks highly of hypodermic injections of water in lumbago and intercostal neuralgia. Dr. Lelut says that for the last three months he has used pure water injections with the best results. He relates how he came to use it. His servant one day upset the bottle containing his morphia solution for subcutaneous injections, and, to conceal her clumsiness, filled the bottle with ordinary water. Dr. Lelut, not knowing this, injected the water into the thigh of a patient who was suffering severely from sciatica, and whom he was treating by the subcutaneous injection of morphia. The patient was astonished at the instant relief of the pain and said: "What kind of liquid is this you are using which causes me no uneasiness or no sickness at the stomach like the former?" Since then Dr. Lelut has used nothing subcutaneously but water.

Dr. Dresch praises the usefulness of this injection, especially in muscular rheumatism. He also tells of a case of osteo-sarcoma of the thigh, in which he used daily 60 etgm. of morphia subcutaneously, chloral, cicuta, and other remedies, and where hypodermic injections of water succeeded in relieving the pain quite as well as morphia, without producing the disagreeable constitutional effects of that drug. Dr. Dresch does not use simple water, but prefers peppermint water.

Dr. Burney Yeo, of London, says he found subcutaneous injections of water useful in relieving the pain of a patient suffering from thoracic aneurism. *Cincinnati Medical News.*

#### IN BRONCHITIS OF TYPHOID AND OTHER ADYNAMIC FEVERS.

R Olei terebinthinæ..... m. x-xx;  
Ether sulphurici..... m. xx-xxx;  
Spts. juniperi comp..... m. xxx;  
Misturæ acaciæ..... ʒ jss;  
M. Ft. haustus. To be taken every two or three hours.

#### ASCARIDES VERMICULARES.

R Tinct. ferri chloridi..... ʒ ss;  
Aquæ calcis ..... Oj.  
M. Ft. injectio. Use one half at night and the other half in the morning.

#### INTERNAL USE OF SALICYLIC ACID.

M. Cassan, observing the slight solubility of salicylic acid in water and alcoholic liquors, sought and found an adjuvant, the citrate of ammonium, which aids greatly in the solution of this substance in water.

The following are two of his formulæ:

R Acid. salicylicæ, ʒ i;  
Ammon. citrat., ʒ ss;  
Spiritus vin. gal., f ʒ vijss;  
Aquæ destillat., ad f ʒ vi.—M.

This solution contains about five grains of salicylic acid to the tablespoonful.

℞ Acid, salicylic.. gr. xv;  
Ammon. citrat.. gr. xxx;  
Syrupi simpl., f 3 viiss;  
Aq. destillat., ad f 3 iv.—M.

#### REMEDY FOR ASTHMA.

Dr. George H. Stone, of Savannah, Ga., writes as follows: "The following prescription has proved of great value to me in the treatment of asthma. Given in the paroxysm it invariably shortens and very much modifies the severity of the attack.

℞. Muriatic acid dil.....f. 3 i.  
Syrup simp.....f. 3 i.  
Aque puræ.....f. 3 v.

"M. S. Tablespoonful every fifteen minutes until relief."—*N. Y. Medical Record.*

## THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D. L.R.C.P., LOND.

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MONTREAL, JUNE, 1877.

#### TO OUR SUBSCRIBERS.

We do not certainly wish any of our subscribers harm, but it would not pain us much if some of them were seized with a remitting fever.

#### REGISTRATION OF COLONIAL DEGREES IN ENGLAND.

Last winter considerable feeling was evinced not alone among the medical profession of the Dominion, but also among those who recognised the deservedly high position which it occupies in this country, on the announcement being made by Sir Hugh Allan, that the agents of the Allan Line of Steamships, which trade between Liverpool and Montreal, had been notified by the London Board of Trade, that henceforth their steamships would not be allowed to clear from Liverpool, unless the surgeons were provided with Diplomas from some College in England, Ireland or Scotland. The effect of this announcement would be, that if carried out it would necessitate the dismissal of quite a number of young Canadian medical men who occu-

pied the position of surgeons on this Line. The hardship of this rule was manifest, and its unjustness equally clear, for in twenty years, during which the law under which this notice was given remained a dead letter, no complaint of want of efficiency had ever been brought against Canadian surgeons; on the contrary we have evidence to show their efficiency, for Sir Hugh Allan says: "The Canadian surgeons are quite equal, both in professional acquirements and gentlemanly bearing, to those we receive from colleges in England." The position of matters was brought to the notice of the Dominion Government, who we are glad to say recognised its importance. Action in Council was taken upon it, and the following minute was adopted, and immediately transmitted by the Governor General to the Earl of Carnarvon; Lord Dufferin we may remark had formerly transmitted to the same noble Lord, extracts from Canadian newspapers, commenting upon the extraordinary order of the London Board of Trade.

*Copy of a Report of a Committee of the Honourable the Privy Council, approved by His Excellency the Governor General in Council, on the 26th January, 1877.*

The Committee of Council have had before them a memorandum dated 25th January, 1877, from the Honourable the Minister of Marine and Fisheries, stating that he has had under consideration a memorial from the Principal and Dean of the Faculty of Medicine of McGill University, Montreal, submitting a copy of a letter from Sir Hugh Allan in reference to a recent regulation of the Board of Trade, seriously affecting the interests of Graduates in Medicine of Canadian colleges, by refusing to allow steamships to clear at the Custom House in England unless the surgeons on board are provided with diplomas from some college in England, Ireland, or Scotland.

The Minister states that he concurs in the views of the memorialists, that the regulation in question would affect injuriously the interests of Canadian Graduates who have passed through an educational curriculum and a professional examination equal to those required in colleges of the mother country, and he recommends that the attention of Her Majesty's Government be drawn to the matter with a view of having the obnoxious regulation of the Board of Trade rescinded, if such an order has really issued.

The Minister observes that the 42nd section of the Imperial Act 18 and 19 Vic., Cap. 119 only requires that medical men on board pas-

senger vessels should be duly qualified to practice in any part of Her Majesty's possessions.

The Committee submit the foregoing recommendation for your Excellency's approval.

Certified,

(Signed) W. A. HIMSWORTH,  
*Clerk Privy Council.*

The result of this action of the Canadian Government, was that when the General Council of Medical Education and Registration for Great Britain met early in May last, the matter was alluded to by Dr. Ackland, the president, in his opening remarks. This gentleman was well able to realise the unjustness of the position they compelled Colonial graduates to occupy, in as much as he met many medical men in this country, which he visited in 1860, as medical attendant to His Royal Highness the Prince of Wales and much have formed some idea of the *Status* of the profession in Canada. The following are his remarks in full.

"Again, a complaint has arisen in Canada as to the action of the Board of Trade with respect to practitioners licensed in the Dominion, and arriving in England in charge of ships. Application being made on the subject to the Medical Council Office, the President directed the Registrar to inform the Board of Trade that the subject of Colonial Degrees had not escaped the notice of the General Council, and to intimate that it was part of a large question—viz., that of degrees in general considered internationally.

As far back as July 4, 1861, and again in the years 1863, 1864, 1867, 1868, and other times up to 1876, the Council had occasion to consider the question of Colonial Diplomas. It agreed to a clause in reference to them in the Marquis of Ripon's Bill in the year 1870. If only for this reason it was a misfortune that Mr. Forster was obliged to withdraw this Bill after it passed the House of Lords.

The time cannot be far distant when the relation of Colonial and foreign graduates and licentiates to legal practitioners in England will be defined. It is hardly just either to them or the nation that their position should be so long a subject of discussion. A committee of the Medical Council declared eight years ago, in its Report on the amendment of the Medical Acts, that "the Secretaries of State in successive Governments have pressed upon the Council the necessity of dispensing with or greatly relaxing its regulations, in favour of persons holding foreign or colonial diplomas or degrees;" and they added that this condition appeared to be a *sine quâ non* to the consent of the Government to introduce any Bill for amending the Medical Acts.

Since the communication from the Board of Trade above referred to, correspondence has taken place between the various departments of the Government: the Colonial, Foreign and Home Offices, the Board of Trade, Local Government Board, and Privy Council. The subject being now ripe for the consideration of the Council, this correspondence was forwarded by desire of the Lord President on April 23 for your consideration; and his Grace awaits your reply. The supposed exclusion of Canadian practitioners from practising in England has caused as much feeling in Canada as the discussion concerning the compelling English practitioners to undergo a new examination in France, though I am informed that English practitioners are re-examined in Canada prior to their legal registration in the Dominion."

It will be noticed that Dr. Ackland states that English practitioners are re-examined in Canada previous to legal registration. Only to a certain extent is this true. In Ontario such is the case, but we believe this would be abolished provided Canadian graduates were treated as English graduates are in the Mother Country, and accorded registration. In the Province of Quebec, we understand that the license has issued at once, without examination, to those holding English qualifications, the only exception to this being holders of the diploma from Apothecaries Hall, who have been examined upon one or two subjects not embraced in the examination for this qualification. On the 17th of May, the seventh day of meeting of the Medical Council of Great Britain, it resolved itself into a Committee, to consider the report of the Medical Acts Committee. The report deals with the question at issue, and we give that portion of it entire.

2. "Remonstrances have come from the Dominion of Canada against the exclusion of legally qualified Canadian practitioners from recognition under the medical law of the mother-country, and particularly as to the grievance and detriment which they suffer in their relation to the *Merchant Shipping Acts* of the home Legislature. And, in respect to British India, an application is made by Sir Joseph Fayrer, on behalf of the Licentiates and Graduates of the Universities of Calcutta, Madras and Bombay, that they may be admitted to the privilege of registration under the Medical Act of the mother-country. The points thus raised are two particular cases of a large general question; and the principles on which they must be dealt with are, in the opinion of the Committee, not exclusively applicable to India and Canada. The



grievance (stated in general terms) is, that medical degrees or licenses, which have been conferred under due authority in British Possessions outside the United Kingdom, and which respectively entitle to practise in the particular Imperial Province in which they are granted, give at present no professional status in other parts of the British Empire; and the question of principle which the Council has to determine is that of admitting such degrees or licenses to be registered as qualifications under the Medical Act. The Committee regards this question as one which urgently needs to be decided by the Council."

4. "The Committee, in preparing to submit its opinions to the Council on the two above-mentioned questions, would remind the Council of previous occasions on which those questions, have been more or less under discussion. In 1870, on occasion of Lord Ripon's Bill of that year, the Council appears to have assented to the principle that "Colonial" and foreign diplomas, respectively valid as titles to practise in British Possessions or the foreign countries in which they are granted, should *under conditions* entitle the holders to rank as legally-qualified medical practitioners in the United Kingdom. Two years ago, however, on occasion of Mr. Cowper-Temple's Bill (which aimed at procuring registration under the Medical Act for women holding foreign diplomas) the Council appears to have taken at least in regard of the foreign diplomas, a position somewhat different from that of 1870; the position of 1875 being, that the Medical Act "very properly" refuses to foreign degrees the privilege of registration in this country, because "the Council has no means of exercising that supervision and control over the education and examinations required for foreign degrees to which the licensing bodies of this country, whether Universities or Corporations, are, by the Act of 1858, subjected." And on two occasions in 1876 the Council expressed itself to the same effect as in 1875: first, with regard to a renewed proposal of Mr. Cowper-Temple's Bill; and secondly, in answering the Memorial in which a large number of registered practitioners, being also graduates in medicine of foreign universities, had prayed the Council to obtain power to insert in the *Medical Register*, as additional qualifications, foreign degrees conferred after examination on duly-qualified registered practitioners."

5. "As regards those previous conclusions of the Council, the committee is of opinion that, so far as the conclusions expressed in 1875 and 1876 differ from the conclusion expressed in 1870, the conclusion of 1870 is that which ought to prevail; provided always that the "conditions" under which extrinsic licenses would be admitted to register in this country shall be such as fairly to represent the essential intention of the Medical Act—"that persons requiring

medical aid should be enabled to distinguish qualified from unqualified practitioners."

6. "In regard of such "conditions" as are here in question, the committee would distinguish between qualifications granted in the outlying possessions (Indian and Colonial) of the British Empire, and on the other hand qualifications granted under foreign governments."

7. "As regards the former, the committee is of opinion that qualifications granted under legal authority in any part of Her Majesty's dominions, ought to be regarded by the Council as presumptively entitled to legal recognition in the mother-country. It is true that the Council would be unable in general to judge the value of these qualifications as accurately as it can judge those for which the Medical Act holds it directly responsible. But the committee is of opinion that sufficient allowance for this consideration would be made by providing that in the *Register* there should be a distinct alphabetical section for "practitioners registered in the United Kingdom in respect of qualifications conferred in the other parts of Her Majesty's Empire." And, in the opinion of the committee, it would of course also be desirable that the right of Indian and Colonial qualifications to be registered as above under the Medical Act should, in case of abuse, admit of being suspended by some such process as that which applies under Sections 20-22 of the Medical Act to qualifications which are granted within the United Kingdom. It is the opinion of the committee that the Council should recommend to Her Majesty's Government to promote at the earliest opportunity legislation to the above effect. But if it should seem that such legislation (as perhaps opening some large questions under the Medical Act) could not at once be provided, the committee would recommend that meanwhile at least the urgent grievance of the Canadian practitioners should be removed by the required small amendment of the Merchant Shipping Acts."

"In conclusion, the committee would propose that, if the council approve of the suggestion of the above report, representations to that effect be at once addressed by the Council to Her Majesty's Government, and that, before the end of the present session of Council, The Executive Committee be authorised to take such steps as in the absence of the Council may be necessary to promote the legislation which has been suggested."

Mr. SIMON as the mouth-piece of the Committee explained the sections of the report, and moved the resolution, which was seconded by Dr. STORRAR, and carried:—

"That Medical qualifications granted under legal authority in any part of Her Majesty's dominions outside the United Kingdom, and entitling to practice in such part, should be registrable within the United Kingdom on the same terms as qualifications are granted within the

United Kingdom, but in a separate alphabetically arranged section of the Register.

Sir DOMINIC CORRIGAN and Mr. LISTER objected to the last clause "in a separate section" and moved that it should be omitted, but the amendment was lost.

We consider, the battle so to speak as already won, and we must congratulate all who have taken part in achieving the result. Sir HUGH ALLAN deserves praise for his decided stand for Canadian graduates—the Universities—McGill College leading off—for remonstratingly drawing the attention of Government to the facts of the case, and they for promptly communicating with the Imperial Government. Nothing more can be done till a new Medical Act is brought up in the English Parliament—which will not likely be before next session. Then the matter will be ended, and Canadian graduates will be able to register their Colonial qualification—entitling them to practise in Great Britain. This has long been claimed as justly due us, and its accomplishment throws open a new field for the medical men of the Dominion of Canada.

#### PERSONAL.

Dr. Robillard, of Montreal, returned from Europe, the end of May, after an absence of about seven months. During his sojourn abroad we understand Dr. Robillard devoted a considerable share of his time to the study of diseases peculiar to females.

Dr. R. Palmer Howard and Dr. Fenwick have been elected delegates from the Medical Department of the University of McGill to represent it, on the new Board of Governors, under the new act of the College of Physicians and Surgeons of the Province of Quebec.

Dr. A. H. David and Dr. Francis W. Campbell have been elected delegates from the Medical Department of Bishop's University to represent it on the new Board of Governors of the College of Physicians and Surgeons of Quebec.

Dr. George Baynes has left Montreal on a brief visit to Europe.

Dr. Molson, lately elected to the out door staff of the Montreal General Hospital, is a graduate of McGill College 1874—and not 1876—as stated by us in our last issue.

At the semi-annual meeting of the College of Physicians and Surgeons of the Province of Quebec, held in Montreal on the 9th of May, an incident of a very pleasant character occurred. Dr. Joshua

Chamberlain of Frelighsburg, who has been one of the Governors of the College since its formation in 1847, on that day completed the 50th anniversary of his admission to the practice of Medicine. Dr. Chamberlain, who is held in high esteem by all his professional brethren, was present at the meeting, in excellent health and spirits. The occasion was taken, therefore, to present him with a series of congratulatory resolutions, which we give below, and which we most heartily endorse :

Moved by Hon. Dr. CHURCH, M.P.P., seconded by R. P. HOWARD, M.D., &c., Vice-President of the College, that—

Whereas, Dr. Joshua Chamberlain, one of the original members of the College of Physicians and Surgeons of Lower Canada, and President of the College during the term from July, 1865, to July, 1868, has this day reached the fiftieth year of his admission to the practice of his profession; be it therefore

*Resolved*,—That this College begs to tender to him its earnest congratulations on the occasion.

*Resolved*,—That Dr. Chamberlain, from the inception of this College in the year 1847, has always manifested a zeal in its welfare, which has largely contributed to its success. That his example for courtesy, efficiency and integrity will ever remain a model worthy of imitation.

*Resolved*,—That the College wishes him length of years to enjoy the close of a long and honorable career.

*Resolved*,—That these resolutions be entered in the minutes of this day's proceedings, and that a suitably engrossed and authenticated copy be presented to Dr. Chamberlain by the President.

It is very generally credited in England, that the person who is to bring Cleopatra's needle to the banks of the Thames, at his sole expense, is the well-known Dr. Erasmus Wilson, the well known authority on skin diseases.

The Medical Department of the University of Pennsylvania will in future demand attendance upon *three* sessions, previous to graduation. Previously only two were required.

#### COLLEGE OF PHYSICIANS AND SURGEONS OF THE PROVINCE OF QUEBEC.

We direct attention to the advertisement of the meeting of this College, which takes place at Three Rivers on the 11th July. Members must pay up their arrears or they will not be allowed to vote. Those who cannot attend can vote by proxy, but as the meeting promises to be a most important one, we trust that every member who can possibly do so will be present.

#### LATHAMS CHROMOS.

The expensiveness of oil paintings render their purchase a matter of difficulty to all but a favored few; at least, really good ones

always have a high market value, while the poorer class, although cheap, are not worth house room. Yet how many long to have their walls graced by pictures, which will be a constant source of enjoyment to them, but are prevented by lack of means. To this class, chromos supply the want, and at a rate which is reasonable. J. Latham & Co., of Boston, advertise, in our columns, an almost endless variety of chromos, and at prices within the reach of every one. We know the firm to be reliable, and that their pictures are not to be excelled. We have seen many of them, and a few of them grace the walls of our study. While patients are waiting, they serve to give to them a relish for the beautiful. We especially advise physicians to expend a few dollars in this way; we think it would be money well spent, for patients who have good pictures to look at and admire never abuse the doctor for keeping them waiting. We recommend *Latham's Chromos*.

#### WINCHESTER SPRINGS.

These springs are situated in the centre of the beautiful and fertile county of Dundas, in the Province of Ontario, and within a short drive of Morrisburg, a station on the Grand Trunk Railroad. The water from the springs is strongly impregnated with Iodine, Bromine, Iron, Potassa, Soda, Sulphur, &c., and from the testimony adduced are of the most signal service in scrofulous, cutaneous and rheumatic affections. An excellent Hotel, capable of accommodating a hundred guests, has been constantly open for over a year, and the number seeking relief at this place is constantly increasing. We are assured everything is conducted in a most comfortable manner, while the expense is placed at the lowest possible rate.

#### DEATH FROM TRANSFUSION.

A man died in Liverpool, England, lately, from having had his blood transfused into another man who was ill. He went on all well for a day or two afterwards. He then became ill, got gradually weaker, and died from erysipelas. The deceased was a man of full habit, and was occasionally given to drinking. The surgeon who performed the operation, before doing so, made particular inquiries from the deceased as to his habits and state of health,

and his answers were satisfactory. At the inquest medical evidence was to the effect that the operation had been skilfully performed. The jury returned a verdict of "death by misadventure," but they were also of opinion that sufficient inquiry was not made by the medical men who made the operation as to the deceased's habits and physical condition, and that he was not sufficiently cautioned as to the risk he was running.

#### OIL OF TURPENTINE IN SCIATICA.

In the *Edinburgh Medical Journal* for March there is an interesting paper by W.A. Ilan Jamieson, M.B., M.R.C.P.E., on "The Treatment of Sciatica by Oil of Turpentine." He gives it in the morning, before breakfast, in the following formula:—

|    |                      |       |
|----|----------------------|-------|
| R. | Ol. terebinth,       | 3 ij  |
|    | Ol. ricin.,          | 3 iv  |
|    | Tinct. card. co.,    | 3 i   |
|    | Mucilag. et aq. ad., | 3 ij. |

This draught is given every third or fourth morning, if necessary, but one dose is generally enough. The beneficial effects are supposed to be due to some peculiar action on the intestinal mucous membrane as pointed out several years ago in a paper by the late Dr. Warburton Boggie, "On the Actions and Uses of Turpentine."

#### A NEW TREATMENT IN POST-PARTUM HEMORRHAGE.

Dr. W. Handsel Griffiths, in the *Practitioner* for March, 1877, speaks thus on the important subject of post-partum hemorrhage: Although not an obstetric practitioner, I have recently been consulted in two cases of severe post-partum hemorrhage. In both cases every means had been adopted but unavailingly. It flashed across my mind in the first case to try the effect of the ether-spray, and accordingly I directed a large spray over the abdominal walls, along the spine, and over the genitals; the uterus at once responded, and the cessation of the hemorrhage was almost immediate. In the second case I lost no time in adopting a similar treatment, and with an equally successful result. I have consulted several eminent obstetric practitioners in Dublin, and am informed by them that they are not aware that this treatment has been heretofore proposed. The advantages of the ether-spray over the application of cold water, and the other means usually adopted in these cases, must be patent to every practitioner of midwifery.

## Progress of Medical Science.

### THE PRESENT TREATMENT OF SYPHILIS AT THE VIENNA SCHOOL.

[The following condensation of Prof. Sigmund's recent clinical lectures on the progress in the treatment of syphilis in the past decade of years (1867-1876), gives the present treatment of syphilis at this, perhaps the largest venereal clinic of our time.]

The author bases his statements upon facts collected at his clinic and from a large private practice.

The following new remedies were tried: carbolic and salicylic acid, and iodoform and oleate of mercury.

The following old remedies were tried in new ways: suppositories of gray ointment, the combination of mercury, sodium and chlorine, and of iron and the oxide of mercury internally; corrosive sublimate by inhalation, a number of the mercurial preparations hypodermically, finally the inunction method combined with balneotherapy.

Carbolic acid, after trial in every way, proved of value only for *external* use, and is recommended by Sigmund for cleanliness for bandaging and rarely for caustic use. A solution of carbolic acid in water, 1-00 is the *general wash* for wounds and ulcers, and for injections into the vagina, rectum, mouth, throat, and especially nose (*ozæna*). One part to 20-30 water, or glycerine or alcohol, is the application for freely suppurating ulcers, for diphtheritic deposits, and especially for gangrenous surfaces. This application 3 or 4 times a day is the best antiseptic of all, and is never followed by any injurious effects. As a caustic (1-2 carbolic acid to 1-3 glycerine) for opening abscesses, etc., it is not better than the old Vienna paste. The Lister bandage method the author has used for gangrenous destructions of all kinds, especially in anaemic patients, and for the separation of gummata of both testicles as large as the fists), and with the most satisfactory results.

Salicylic acid is like carbolic, but its high price prevents its general use.

Iodoform internally in small doses (0.10-0.15-0.20-30 daily), in pill form, morning and evening, induces after a time catarrh of the stomach and bowels. Its odor as discharged from the mouth and anus in gaseous form is so unpleasant to the patient and those about him as to lead to its disuse; moreover its external use is not of much value.

The oleate of mercury by inunction had no advantage over mercurial ointment, except that it never produces salivation. It is better in private practice because less known, and therefore betrays less.

Suppositories of mercurial ointment (4.5-1.5 cocoa butter each) were tolerated by but very few. Most patients are attacked with tenesmus, colic, more or less violent catarrh of the stomach and bowels, and in 2 or 3 days no mark of them could be retained. Moreover gingivitis and salivation occurred, without very favorable influence upon the syphilitic process.

Corrosive sublimate, with collodion externally is a most valuable agent (1 part sublimate to 8-16 collodion) when painted, over psoriasis palmaris and plantaris twice daily after a bath with soap. Gloves and stockings are to be drawn on afterward and left on over night. The heavy, thick infiltrations and massive horny incrustations always disappear after this treatment.

Sublimate inhaled locally into the mouth for pharynx and larynx complications preserves its high place, but it is without general effect because it can not be long continued.

Subcutaneous injections of mercurials, particularly with sublimate cyanide and calomel, show no special difference from each other. New phases of the disease are not prevented from appearing by this or any other form of treatment. The old method of administering mercury deserves the preference as a rule, and hypodermic medication is only to be resorted to in special cases.

Baths and mineral waters assist every form of treatment in marked degree by hastening metamorphosis. Of all the methods of treatment the "inunction cure" is most assisted by balneotherapy. Exercise in the open air is one of the great advantages also gained at a watering place. Many of the cases of the so-called scrofula, obstinate to iodine and bromine, because they are really inherited syphilis; cases of gummata and corneal and conjunctival affections, are readily cured of their old and obstinate, often disfiguring, troubles, by adding mercury to the treatment, while most of the anaemic and reduced patients are restored at once.

The time at which general treatment is to be undertaken, according to the author's careful clinical observations, is determined by the appearance of disease at places distant from its reception. Papulæ in the vicinity of the place of infection and upon the tonsils, together with general glandular enlargement, which manifestations never occur before the sixth to the eighth week, are the indications for general treatment.

The number of facts has more and more increased, showing the successful treatment of syphilis in pregnancy with mercurial preparations, and especially with inunction. This treatment, the author states, never produces abortion or premature labor. Patients improve under it, and, if the treatment shall have been commenced at the time of appearance of papules, the mothers carry their children to maturity.

The children then very often do not show the signs of syphilis, and remain alive, and if the children are born and badly nourished, they recover generally under good diet, of which the milk of their mothers is the best. Treatment begun before the fifth month of pregnancy, and continued long enough, accomplishes this result, while that begun after the sixth or seventh month, leaves less to hope. But even in the last months of pregnancy, with very extensive papular syphilides, the "inunction cure" caused no injury to the fetus. Many pregnant women have here reached the normal end of pregnancy, and did not suffer the grave injuries to the os uteri and external genitals (ruptures, lacerations, etc.) which so often occur in syphilis, and the puerperal bed was just as favorable as in non-syphilitics.

Syphilitic children are above all things to be put under most favorable hygiene, from which the most is to be hoped. The syrup of iodide of iron and sublimate baths are of great value in their treatment. The chemical examination of the milk of women methodically treated by the inunction method, showed quicksilver in the milk for fourteen days after the end of treatment. What value such milk may possess for the suckling remains to be proven. The experiment of inoculating the milk of animals (cows, sheep, goats, and asses) with mercury and iodine, to use it in the treatment of children, have led as yet to no practical results. The author could not get the results said to have been obtained on the Scandinavian coast by feeding sheep with sea plants containing much iodine and bromine.

The gummatous forms of syphilis, the tertiary forms, find in sublimate, most especially in inunction of mercurial ointment, a more permanent means of cure than in the preparations of iodine, whose effects are most rapid in cases, it is true, but are less permanent.

The treatment of visceral syphilis and nerve syphilis has clearly gained since the combination of hydrotherapy and mineral waters with the preparations of mercury and iodine.

As in former, so also in late years, has the value of expectancy and observation established itself in the therapy of the first stage of syphilis, and Sigmund has seen a very considerable number [*einen sehr betrachtlichen Theil*] of patients known to him from former years, permanently cured by pure local treatment of the first symptoms—cases of spontaneous or natural cure. This result appears to occur oftener among women than among men. Further, the exhibition of mercury in small doses at longer intervals has proven more useful than attacks with larger and stronger doses. For the treatment of the second stage of syphilis, the mercurial preparations are the most reliable means of cure [*Fur de Behandlung des zweiten stadiums der Syphilis bilden Quecksilberpräparate das zuverläss-*

*sigste Heilmittel.*] That in the third stage in different seats and forms of the disease, mercury is still very often the chief remedy [*das Hauptmittel*] with iodine, bromine, and other agents with it in combination, has already been mentioned.

The careful study of the history of chronic syphilis refutes the error, again recently committed, of ascribing the development of the graver forms of the third stage to the use of mercury. J. T. W.—*Allgem. Mediz. Central-Zeitung*, Nos. 102, 3, *Med. Neuigkeiten*, January 20-27, 1877.

#### THE TREATMENT OF TAPEWORM.

Prof. Mosler has been advocating a system of treating tapeworm which, according to a Swiss medical journal, has been attended with remarkable success. Its chief characteristic is the injection of large quantities of warm water into the colon, after the administration of the anthelmintic. The diet is first regulated, food being given which is supposed to be distasteful to the tapeworm—bilberry-tea, herrings, sour cucumber, salted meats. The intestines having been, as far as possible, emptied by laxatives, a dose of the extract of pomegranate-bark is administered, prepared from the fresh bark, and then a large quantity of warm water is injected into the rectum. The theory is that the worm, previously brought down into the colon, is prevented by the water from attaching itself to the wall, and is brought away by the liquid on its escape. It is asserted that in every case in which this treatment was adopted the head of the worm was removed.—*The Lancet*, June 23, 1877.

#### EFFUSIONS OF THE PLEURA, AND THORACENTESIS (*Med. Record.*)

Dr. Beverly Robinson, in a paper on the conditions existing in effusions of the pleura, comes to the following conclusions:

Inasmuch as it is proved that puncture of the chest-walls, with a capillary needle attached to the improved aspirator, whenever performed with due precautions against the entrance of air into the pleura, is a perfectly simple and harmless operation, and further, that any appreciable amount of liquid, irrespective of its nature, is by its presence pernicious, and may become dangerous; therefore, I hold that, in all cases of pleuritis in which fluid is present, we should without hesitation make use of the aspirator to withdraw the morbid effusion.

To this law I shall only affix one limitation and one exception.

The limitation is whenever very large or excessive quantities of fluid are present, it is wiser to puncture the chest on two successive occasions, so that all risk of acute oedema of the lung on the affected side shall be avoided.



The exception is if the patient be very much enfeebled and the effusion be small or moderate, we may with advantage delay the operation during a brief period, until his forces have been somewhat re-established.

By proceeding after this manner, all danger of fatal syncope will be obviated. Meanwhile, of course, if the effusion from small or moderate, rapidly become large or excessive, the formal and imperative indication is to operate as soon as possible. In syncopal states there is anæmia of the brain, which is often successfully treated by placing the patient flat on his back. In view of this fact, Marrotte has recommended to operate while the patient is in a half-reclining or completely recumbent posture, so that there may be less predisposition to this condition. This practice seems to me judicious.

—*Clinic Cincinnati.*

#### EXTERNAL TREATMENT OF PERTUSSIS.

Permit me to call the attention of the profession, through your valuable journal, to the successful treatment of whooping cough by rubefacients and revulsive applications. My attention was first attracted to this mode of treatment by an intelligent old lady. Some four years ago, while visiting a patient in the family where she was residing at the time, I incidentally spoke of a granddaughter who was suffering from an attack of whooping-cough, and as she was but two years old and quite delicate, I expressed some doubts about her recovery. The old lady remarked that she could tell me how to cure her in three days, and said she had obtained the prescription over fifty years before, from the celebrated Dr. Drake, who was at that time her family physician in Cincinnati. The source from whence she got the prescription made me anxious to know more about it. As she had preserved a copy, I will give it—

R. Olei succini rectificatim,  
Tincturæ opii,  
Aque ammoniæ,  
Olei olive,                    *aa* ʒj. M.

Sig.—Rub along the whole track of the spine two or three times a day; to be discontinued when the parts become tender.

As soon as I returned from my visit, I prepared the liniment, according to the formula, and immediately commenced the treatment. The patient at the time had terrible paroxysms of whooping. The result was that whooping ceased entirely in less than three days. The relief was so prompt I was confident it was brought about through the use of the liniment, as I had dropped every article of medicine after commencing the local applications.

I have, since that time, used the same treatment through several epidemics of the disease, and always with success. The treatment should

not be commenced until the whooping paroxysm sets in. Just how, or through what channels the cure is effected, I am unable to say, but facts are stubborn things. I will only hint that the action of the medicine may be through, or on, the communicating branches of the pneumo-gastric nerve, the spinal accessory, first and second cervical, and sympathetic. I have no other object in giving this to the profession than to stimulate others to a trial, and in return beg them to give the profession the results of their observations.

H. MALLORY, M.D.

Hamilton, Ohio, July 10th, 1877.

—*Phil. Med. and Surgical Report.*

#### A NEW ANÆSTHETIC.

A new anæsthetic has been described by M. Rabuteau before the Academy of Science, Paris. It is hydrobromic ether, which, he says, can be administered without difficulty, and which is, moreover, eliminated almost completely by the respiratory passages. It holds an intermediate place between chloroform, bromoform and ether. Considering the frequent recurrence of chloroform accidents, any new anæsthetic which promises to yield a greater degree of immunity from danger of a fatal result is worthy of trial.—*New Remedies.*

#### NOTE ON THE IMMEDIATE CURE OF PILES.

The following note on the immediate cure of piles by H. A. Reeves, F.R.C.S. Edin., is found in the *London Lancet* for May, 1877.

During the latter part of last year I commenced the treatment of piles about to be described, and having now submitted eighteen cases to this new method, and sufficient time having elapsed to form a fair judgment as to the result of most of the cases, it is time to make the simple operation more public, so that others may try it, and report their results. All the patients operated on suffered from the severe form of internal piles, and four of them were bad cases—i.e., the piles were very large and ulcerated in large superficial patches, and the general condition was distressing, as there were anæmia and haggard aspect due to hæmorrhage and pain.

To this rapid method of treatment I have applied a term used by Mr. Barnard Holt, and now so well known to the profession—viz., the *immediate cure*; and I have used the word *cure* advisedly, as the first batch of patients have not had the slightest trouble since they were operated on. The last five cases are too recent to say anything as to ultimate results.

I feel that the term "immediate" is more strongly applicable to this method than that of Mr. Holt, for not only is the operation rapid, but the *entire treatment* is very short as compared with the ordinary methods of treating hæmorrhoids—i.e., by nitric acid, ligature, or clamp and cautery.

In the *immediate treatment* of urethral stricture

—excellent as I have come to regard it in fit cases—the operation is speedy, and in the majority of cases safe; but the *treatment* is very prolonged—nay life-long; and the *cure*—well, never. In the *immediate cure* of piles, I can truly state that, so far as my present experience goes—and this can be corroborated by several witnesses and by the patients also—the operation is rapid and trifling, and may in some cases be done without anæsthetics; it is unattended with the least risk and the *cure* permanent.

The operation is simply this. The piles being well down, they are punctured with the conical pointed end (which I have had made by Messrs. Mayer and Meltzer to fit on to Dr. Paquelin's gas cautery) to their bases, the number of these hot punctures varying with the number and size of the piles, a pile the size of half a small walnut requiring two or three. A dull red heat should be used, and the point gently rotated while being extracted, and *not pulled out*, because if this be done a portion of the escher will be withdrawn with the instrument, and some hæmorrhage will follow. Should the disease be of old date, some of the piles will be quite hard; these I have pierced to their softer attachment, at the feeding veins of which they were clot-laminated, and even fibrous varicose transformations. Ulcers and fissures in connection with the hæmorrhoids were touched with the cautery.

If this simple plan be properly followed, there is no hæmorrhage, but should there be slight oozing, a touch of the cautery at once stops it; the piles are then returned, and a half-grain morphia suppository introduced. The bowels are kept confined by a quarter of a grain of morphia daily, by mouth or subcutaneously, for the first two or three days, and on the fourth or fifth day an enema-tube is gently introduced and a warm injection given, and followed on the succeeding day by a laxative. The first two, or in some few cases three, motions, produce pain, but nothing as compared with that the patient suffered before the operation; and at the expiration of a week they are discharged, with such directions as to diet and regimen that will promote the healthy functions of the rectum, and which are known to all professional men.

It is right to state that two of these eighteen cases were not allowed out for ten days, and one for a fortnight, but in all there was some other pre-existing complication, either urinary or uterine. Sixteen of them were treated at the Hospital for Women, and two in private. I have seen them all several times since, and examined them with finger and speculum, and I can say that the satisfaction of the patients at their rapid and permanent relief is not greater than mine when I observed how little damage was done to the rectum, as evinced by the difficulty of detecting, some little time after, any result, in the shape of cicatrices, of the operation. The ages of the patients varied from twenty-three to sixty.

I am happy to say that I have not yet had an opportunity of examining post-mortem any case operated on, but I conceive that the *rationale* of the method is that the igni-puncture sets up a phlebitis

which soon leads to obliteration of the diseased veins; that the phlebitic clot is, somewhat rapidly, sufficiently absorbed, or so altered as to render it difficult for the finger to detect any nodulus or lines of thickening in the rectum. Whatever the traumatic pathological change may be, certain it is that the *symptomatic* relief is not only speedy but lasting. I may mention that I had occasion to operate on a patient for urethral mischief, who had undergone this procedure for three weeks previously, and neither I nor others present could discover the least trace of any recent operation on the rectum.

I do not wish it to be thought that I consider the operative results, as regards nodulation and disappearance of the altered piles, will always be so rapid; this may or may not be so without affecting that which the patient and the surgeon most desire—viz., the cure of the case. I briefly sum up what I consider the advantages of this method over the old plans.

1st. The operation is quickly done.

2nd. The cure is much more speedy, as, by the ligature or clamp and cautery, three weeks is considered quick time for convalescence.

3rd. There is no fear of secondary hæmorrhage, as there is no ligature to separate, and no wounded surface to cauterize.

4th. Nothing is removed. To the patient this is often a strong recommendation; to the surgeon, at first and without experience of this method, it may seem a drawback, but sufficient trial will convince him to the contrary.

5th. There is no apprehension of secondary abscesses and fistulæ so far as my experience has gone.

6th. There cannot possibly be a stricture as a result of the operation. That this has occurred several times after the old methods no one can gainsay, and I may quote a case sent me by Dr. Heywood Smith, on which I operated by the clamp and cautery, and only removed the piles and not a particle of other rectal tissue, and in seven weeks had to commence the use of a bougie for an annular stricture near the orifice. Nothing of the kind pre-existed.

7th. There are no relapses. Two of the cases I operated on had been elsewhere treated by ligature, and the other with clamp and cautery. Of course, if all the diseased part be not punctured at the time of operation, the portion left untouched may be the source of future trouble, necessitating an operation, and it may be that this was the explanation of the relapses in the two cases just mentioned. On the other hand, it is fair to state that other veins, already weak at the time of operation, but not sufficiently so to attract attention, subsequently enlarged and required meddling with.

8th. In patients who can bear a little pain no anæsthetics are necessary, as the operation is a quick one.

It is obvious that this plan can be applied to other varicose veins and to nævi.

Before concluding I may mention that I have, in two cases, tried the revived plan of sudden dilation of the sphincters; one did moderately well, the other had to be igni-punctured. I have, in one case, in-

jected the piles with solution of perchloride of iron undiluted, but the result was not satisfactory. I believe, however, that a weaker injection of iron, or of water and iodine, or of chloral, would be effectual, and have the advantage of not needing anæsthetics.

#### TREATMENT OF PHAGEDÆNIC ULCERS.

Weisflog, in a recent paper (*Virchow's Archiv*, B. 66), states that the pain of phagedænic ulcers ceases almost immediately if the patient is immersed in a "faradizing bath." One of the electrodes is connected with the bottom of the bath, and as soon as the wound is submerged in the warm water the patient touches the other electrode, which is covered with sponge, with the tip of one finger, gradually bringing the others into contact with the sponge, according to the sensations he experiences in the ulcer. The effects are less marked and less beneficial if the ulcer is out of water. For the purification of the wound he employs a weak ointment of nitrate of mercuric oxide (1 to 50). For the relief of the *dolores osteocopi*. Weisflog recommends the use of subcutaneous injections of solutions of the nitrate, which are much less painful than those of corrosive sublimate, and never causes abscesses; whilst much larger quantities of mercury can be introduced into the system without causing salivation.—*London Lancet*.

#### THE TREATMENT OF CHOREA.

The following abstracts are from a paper, by Dr. Howship Dickinson, published in the *London Lancet* for April, 1877:

Chorea, then, as far as concerns its individuality as a disease, must be dealt with neurotically, though general is often more to the point than special treatment, as it may be needful to prevent a patient dying of a disease before we can attempt to cure him of it. In severe and acute cases, where the patient is being worn out by incessant movement and want of sleep, liberal feeding, stimulants, and the means of procuring timely slumber—the bromides, opium, or chloral—may enable him to tide over a period of mortal peril. Next comes the use of bodily restraint. The violent and erratic movements of chorea appear to be one mode at least by which the exhausting effect of the disease is produced; and the improvement which follows upon their mechanical control suffices to show that some at least of that effect is due to the actual movement, while perhaps some may be attributed to the muscular attempt, which the bandage makes futile but does not prevent. Added to this, restraint is important in preventing the excoriations and sores which the jactitation causes, and which may contribute perceptibly to the typhoid prostration, which is one of the worst phases of the disease. A sufficient measure of controlment may be sometimes obtained by merely tying the feet together and firmly fixing the

upper sheet. A more effective arrangement is an embankment of pillows along each side of the bed closely adapted to the patient, who lies in the trough between. In extreme cases it may be necessary to fix the limbs with splints. A well-padded splint, such as is used in hip-disease, reaching from the axilla to the ankle, is placed along each side of the body, with the arm bandaged to the outer and the leg to the inner aspect. The child, excepting that he can still make faces, has little more power of movement than a mummy, and resembles a Swiss baby within its encasement, which can move nothing but the eyes. Anything which causes alarm or distress is to be scrupulously avoided, but the agitation of the limbs is in itself a source of great discomfort, and any gentle means of preventing it is usually acceptable to the patient.

In less severe cases mere rest in bed will do much and occasionally all. Chorea will almost always improve up to a certain point, sometimes to recovery, under the simple influences of rest and time. These, and now and then a purge, may be all that is needed. A word as to aperients may precede what has to be said touching special modes of treatment. Constipation belongs to several nervous disorders of which chorea is one. It is perhaps rather a result of the chorea than its cause; nevertheless purging does distinct good and sometimes is the only medicinal process needed.

Passing now from medicine in general to medicine in particular, I am bound, with regard at least to the acuter forms of the disease, to give the first place to the sulphate of zinc. This is no novelty in practice; what novelty pertains to it is the denial of its use in chorea. I believe I am not to be generally charged with therapeutical credulity, and upon this point I should not have ventured to express a confident opinion were it not that I have had more than ordinary opportunities of correcting by experience any errors into which I may have fallen. Many metals—antimony, arsenic, iron, and zinc—markedly influence the disease in question. Antimony perhaps controls the jactitation of severe and recent chorea in the most immediate manner; but it must be given largely to be effective, and so used it adds to the prostration of the patient, and sometimes, I believe, is the chief cause of a fatal result.

**ZINC IN CHOREA.**—Zinc stands next in the order of efficiency. To be of use it must be given in large doses. A grain of the sulphate may be given three times a day, or in a very severe case more often, and a grain added to each dose every day until the dose amounts to between fourteen and twenty-six grains. Thus administered and sufficiently diluted it causes no sickness nor any prominent effect but the abatement of the jactitation and grimace. A scruple or rather less is commonly a sufficient dose, but much more may be given. In an exceptionally

severe case, of which the subject was a girl of seven, I gave with apparent advantage, and certainly without harm, a dose which at last reached forty-five grains three times a day, or one hundred and twenty-five grains in the twenty-four hours. Under this the child became able to talk, feed herself and walk, none of which she could do before. The greater amount passes off by the bowels, and the metal can be recovered from the fæces. I have not succeeded in finding a trace in the urine, so that probably but a small proportion is absorbed; though from the greater effect upon the nervous system of large doses than small, it is probable that the quantity absorbed bears some relation to the quantity swallowed. As touching the curative effect, it may be said that a course of treatment which lasts necessarily for a fortnight secures Time as its ally, in acute diseases no unimportant auxiliary. But chorea is a disorder of infinite duration. The zinc may be begun at any period until the acute form has merged into the chronic, and I have often been able to assure myself that recovery dated from the beginning of the remedy, and not from the beginning of the disease. I have often recognized, as I thought, an early effect of the zinc in a peculiar brightness and clearness of complexion; to be succeeded, if the drug be long continued, by marked anæmia. It is hence often advisable to associate with the zinc an unaugmenting dose of sulphate of iron. With the subsidence of the chorea the zinc may be gradually withdrawn, and the iron at last continued alone, or with the addition of quinine. Another salt of zinc, the valerianate, is of especial use; it is suited to cases of a less acute type than to require the sulphate, and to those by no means infrequent instances in which the attack has with it some of the characters of hysteria.

**IRON IN CHOREA.**—Next to the salts of zinc, and often to be preferred to them, come those of iron. Where there is evident anæmia, iron in some shape should be given from the first. Zinc does best with florid children, iron with the pallid; zinc when the symptoms are acute, iron when they are chronic. I have met with good results from the syrup of the bromide; and the valerianate, like that of zinc, may occasionally be resorted to. In the more lasting and slighter forms of the disorder, where perhaps an occasional twitch or grimace or some awkwardness in the limbs is its only sign, arsenic, as a nerve tonic in small and long-continued doses, is often of service; and a similar statement may be somewhat more emphatically made with regard to strychnia, particularly if this alkaloid be given together with iron. Thus, for the slighter and more lasting forms of the disorder, the pharmaceutical remedies are iron, arsenic, and strychnia; often iron together with one of the others. Strychnia, like iron, may be advantage-

ously given as bromide, in the liquor strychniæ bromidi.

The smaller shapes or lingering remains of chorea call, as a rule, for general tonics; and among such perhaps the most effective is change of air. There is, indeed, no disorder in which a temporary exchange of town for the country or the sea is more decidedly curative.

Where chorea is much mixed with hysteria, as we sometimes see in developing girls, the treatment must be correspondingly modified. Electricity and shower-baths are sometimes in these circumstances useful adjuncts, though with simple chorea such agitating measures could scarcely fail to be mischievous.

Regulated movements, as drilling or dancing, have been recommended. I have often suggested dancing, and thought it did good. The history, indeed, of the epidemics of dancing mania, which have been credulously traced to the bite of the tarantula, or oddly associated with the name of the Baptist (Herodias appears to have been the means of associating, in mediæval fancy, a profane amusement with the fame of that austere moralist), supplies many striking illustrations of the influence exerted upon the voluntary muscles by rhythmical sounds; not that the dancing epidemics were what we now know as chorea; they were more allied to hysteria.

I have mentioned only means of treatment which have been found to be or thought to be useful. I could make out a long catalogue of drugs which have been tried and abandoned. Belladonna has been liberally given without effect. The late Dr. Fuller gave to a child with chorea eighty-four grains a day of the extract, of which the purity was ascertained, and the remedy was not destructive either to the disease or the patient. I have used Calabar bean and conia without being able to refer any beneficial result to them; and although I have seen children improve under codein, I have not been able to assure myself that they would not have done equally well without it.

#### THE VALUE OF THE BINDER

Dr. J. Hyde Houghton, M.R.C.S., writes to the *British Medical Journal*.:—

"Initiated in midwifery by my late lamented friend, Dr. Edward Rigby, I was early taught the importance of the 'binder' as a means of preventing *post partum* hemorrhage; and through a period of nearly thirty-three years, during greater part of which I have had a very extensive midwifery practice, I have only had one fatal case in my own practice. In every case I myself carefully bandaged the patient as tightly as possible, with a shawl or large towel, in which I generally wrapped a book to form a pad over the uterus, with the best results, though I had then sometimes to deal with cases of hemorrhage.

"In the year 1861, however, I was engaged to attend one of the largest women I ever saw. She was tall, and immensely stout. The labor was natural, but rather tedious; and after it was over violent hemorrhage set in. Here any ordinary binder was useless, and to grasp the uterus through the parietes was impossible, from the immense quantity of fat on the walls of the abdomen. I had the advantage of the advice of my old friend, Mr. S. D. Fereday, and all the means which we could devise were used without effect. We watched her for some hours, a certain quantity of draining going on in spite of our efforts, and we anticipated a certainly fatal issue. Where art had failed, however, nature came to her assistance and she ultimately recovered.

"In the following year I was again asked to attend her, and was called to see her one Sunday morning. I had a most lively recollection of her last labor, and a firm reliance on the binder, and was determined, if possible, to bring one to bear on her huge abdomen; so I went to a saddler who lived near, and there extemporized a binder. It consisted of an oval piece of the strongest 'butt leather' he had, ten inches long by eight wide, to each side of which a strong strap (nearly as strong as stirrup-straps) with buckle, was attached. With this I was able to attain some degree of pressure. Suffice it to say the labor went on well, and no flooding took place.

"For some time afterward I took my 'binder' with me only when I had to attend stout persons; but I soon found that the comfort of it was so great, and the advantages so signal, that I began to take it with me to every patient I attended, and have continued to do so for the last eight or nine years, and during that period I have not had a single case of hemorrhage that has given me the slightest anxiety.

"This is the practical fact I wish to bring forward: I apply the bandage gently before the child is born. I make the nurse press on the pad during the expulsion of the child. I then tighten the bandage pretty firmly; and after the expulsion of the placenta, which is rarely long delayed, I again tighten it as firmly as the patient can comfortably bear. It is very rarely necessary to do more; but if the pains be sluggish or infrequent, and if pressure by the binder does not increase them, I give a dose of ergot just before the child is born."—*Philadelphia Reporter*.

FOTHERGILL, after discussion of the causes of sleeplessness, tabulates as follows the remedies which have been hitherto most highly recommended for this complaint:

1. Opium is indicated when sleeplessness is caused by pain; when irritation of the vascular system is present, aconite and antimony are to be combined with it.

2. Hyoscyamus is of service when sleeplessness depends on disease of the kidney.

3. Chloral hydrate is inefficacious in sleeplessness dependent on pain, though it is a hypnotic *par excellence* in the sleeplessness of fever, particularly in children. This remedy is injurious in ill humor, brain exhaustion, and in the sleeplessness of melancholy.

4. Bromide of potassium acts as a sedative either on the brain cells or the vessels of the brain; it is indicated in those cases where peripheral irritations are present, and is very beneficial in the sleeplessness which is the result of maladies of the pelvic organs.

5. Alcohol is a powerful hypnotic in those cases in which sleeplessness comes from sorrow, ill humor, and mental disturbances.—*Boston Medical and Surgical Journal*.

#### ON CHLORAL.

Dr. LIEBREICH, Professor of Therapeutics in the University of Berlin, in an article on chloral (*Practitioner*, June, 1877), says: Taking full account of the clinical facts, I believe that in the case of chloral it is in the highest degree essential that it should be freed from all chemical impurity whatever, and that the chemical impurities special to chloral hydrate, other than its highest state of crystalline purity, are, more than in other cases, of a kind to interfere with and to contravene the legitimate and desired effects of the drug. For this reason I would altogether prohibit the use of chloral, either in solution or otherwise, which is not of the utmost purity. I may add that there is no practical means by which the purity of chloral in solutions can be ascertained; and the best authorities state that a very large proportion of the solutions current in medical and pharmaceutical practice are of an impure, untrustworthy character, and therefore liable to produce dangerous results. Pure chloral produces rest and relieves pain without giving rise to excitement, nausea, or gastric irritation; and its effects do not need to be enhanced, as in the case of opiates, by increasing doses, if its administration needs to be continued. Impure chloral, on the other hand, irritates the stomach, produces excitation, headache, sickness. To produce the best effects of chloral it should not be given on an empty stomach. It is not necessary that a full meal should have been taken, but it is desirable that some light nourishment or a biscuit or something of the sort should be eaten before the dose of chloral is administered.

I may add, finally, one word as to the clinical observation of the effects of chloral hydrate when it has been administered in excess, or when it has been used as a poison: Chloral hydrate poisons by paralyzing the heart, and its effects are observable in retardation of the pulse and respiration. Hence I have been led to urge the use of strychnine in combatting these effects. The results of my experiments (*Transactions of the Academy of Medicine of Berlin*) have been confirmed by subsequent ob-



servers, but I believe that this antidotal use of strychnia to combat excessive or fatal doses of chloral may still be usefully brought to the notice of practitioners in general; for it is not so far or, I observe, so generally known as it might be. I have often been struck with the report of bounding pulse, severe headache, and nervous excitement in reported cases of an overdose of chloral; these are not the characteristic effects of chloral, but of impure and poisonous substances sold as chloral, and especially the various impure and unreliable solutions of chloral, which physicians and dispensers too readily employ.

#### CARBOLATED CAMPHOR AS A SURGICAL DRESSING.

Dr. Soulez, of Romorantin, recommends this substance (*La Tribune Médicale*, Dec. 24). He prepares it by mixing 15 grains of carbolic acid (dissolved in an equal quantity of alcohol) with 37½ grains of powdered camphor. The product is an oleaginous pale-yellow liquid, with a feeble odour of camphor, and none of carbolic acid. It does not mix with water or glycerine, but mixes with olive and almond oils. The infusion of saponaria (1 part of the leaves of soapwort to 10 parts of water) emulsifies it, as does also the alcoholic tincture of Panama bark. When mixed with an equal part of the carbolated camphor, this tincture produces another emulsion, which, when weakened with water, is used to prepare the antiseptic wadding.

In dressing a wound, Dr. Soulez covers it first with a square of wadding, which is impregnated with a mixture of carbolated camphor and olive oil. This must be large enough to extend 2½ to 3 inches beyond the wound. This is then covered by six other layers of wadding, impregnated with the emulsion above mentioned. Each layer should be one inch wider than the one below it. A thin envelope of caoutchouc is then applied to prevent evaporation, and over this a layer of dry wadding, and the whole is then secured by a bandage. The author alleges that this dressing is very easy of application; all the materials can be prepared beforehand and kept in well-covered jars. Before applying it, the wound should always be washed with the emulsion of carbolated camphor. When applied to a stump, this dressing keeps it enveloped in a warm atmosphere saturated with vapour of water, which lessens the exciting effects of the oxygen of the air, and is protected by the numerous layers of soft wadding which kept out all infecting germs. Dr. Soulez renews the dressing usually every six days, but sometimes leaves it on for ten days. So far he has never known the carbolated camphor to cause the least irritation of the skin or the wound. When the caoutchouc is removed, all the layers of wadding are found to be as moist as when first applied. He states that he has obtained the following advantages from the use of his dressing: 1. Lessening of the reaction after major operations; 2. Cessation or diminution of the pain; 3. Diminution of the suppuration.—*London Med. Record*, May 15, 1877.

#### SALICINE IN THE TREATMENT OF RHEUMATISM.

Mr. A. D. L. Napier, in a short article on the action of salicine contributed to the *Practitioner* (June, 1876), thus speaks of his experience with this drug in rheumatism.

The form of rheumatic disease for which I have most frequently ordered salicine is the arthritic, and in these cases relief was almost invariable experienced. In one case of severe arthritis of the left finger, wrist, and ankle-joints, decided benefit attended the exhibition of a fifteen-grain dose, and, though the disease was of six days' standing, complete relief from pain was experienced after three other doses. In such cases I have repeatedly seen reduction of pain, redness, heat, and swelling about an hour and a half after the administration of a twenty-grain dose.

The salicylate of soda, in addition to its general action in lessening arterial tension, acts frequently as a powerful diaphoretic, producing increased perspiration, large flow of urine, and in some cases an increased quantity of saliva. These latter effects seem to be more often caused by the soda salt than by the acid. Although swelling frequently is materially decreased in a short time by salicine, yet in some cases this is not so: I have a patient at present, who suffered from rheumatic arthritis of the wrist-joint, was treated by salicylate of soda, and relieved of all acute pain, more than a month ago, whose joint is still greatly swollen, and useless for all active exertion; he is now rapidly improving under galvanism.

Symptoms exactly similar to cinchonism may follow the prolonged use of salicine. An old gentleman, who was under my care suffering from rheumatic affection of the wrist and ankle joints, was ordered twenty grains of salicylate of soda every two or three hours; a few doses speedily cured him. He ceased taking the drug, and was again similarly affected, about ten days after his first attack; the drug was resumed, and he was recommended to continue it for a fortnight, in ten-grain doses twice daily, after all symptoms had disappeared. He only used it, however, for two or three days. Within a short time he again became ill, and, having experienced the decidedly beneficial action of his former medicine, resumed taking it without sending for medical advice. On this occasion, evidently desiring to make assurance doubly sure, he persevered in taking twenty grains every three hours for more than a week, although the pain had almost ceased after two or three doses. He then became very deaf, had ringing noises in the ears, experienced severe headache, thirst, loss of appetite, and felt dull and heavy. The medicine was discontinued, and the unpleasant symptoms shortly vanished. It is necessary for the perfect action of salicine that the drug should be used in reduced doses for some time after acute symptoms are dispelled; I have often seen a relapse from a too early cessation of the medicine.

In muscular rheumatism, salicine affords some relief, but its action in such cases has given uncer-

tain results in my hands. In neuralgic affections, I have seen good from salicylic acid, more especially in mixed cases of neuralgia and rheumatism; one case of neuralgia of the brachial plexus was undoubtedly cured in a very short time. From its greater solubility, and from its being more easily taken by the majority of patients, I have found salicylate of soda preferable to the salicylic acid. With the exception of the greater diaphoretic action of the former, I have been unable to discriminate between their therapeutic action.

#### PODOPHYLLIN.

The reason why this valuable remedy is often objected to is that it is very liable to produce nausea when administered in its crude state, as furnished by the druggist. To overcome this objection, I have caused it to be most thoroughly triturated with equal parts, by weight of white sugar. By this process an infinite division is made, which makes it more efficient and generally free of any nauseating action.—[*Medical Brief*.]

#### SEVERE DIPHThERITIC PARALYSIS CURED BY THE CONTINUOUS CURRENT.

Professor Peter, of the Hôpital La Pitié, has had recently under his care a patient affected with paralysis following very acute diphtheria, which is remarkable, not only on account of its severity, but from the success of the treatment employed (*Journal de Médecine et de Chirurgie Pratique*, March, 1877.) The woman was taken, about the middle of last November, with a slight sore throat, probably diphtheritic from the account which she gave of it, which lasted for about twelve days, but did not oblige her to stop work. About a month after the commencement of this attack, on December 20, after a violent fit of passion, the patient felt some signs of paralysis. Paralysis of the soft palate and of the pharynx was complete; food returned by the nose, and swallowing was impossible. Articulation was abolished. There was some marked weakness of sight and a slight degree of amblyopia. The woman remained thus during seventeen days without taking any food. She was brought to the hospital on January 4, in a very enfeebled state. Oesophageal catheterism was practised, and nourishment given by this means, which had to be continued for five weeks. It was not till fifteen days after her admission that electrization was commenced on account of want of the necessary apparatus. The continuous current was employed, applied to the neck for about an hour each day. At the end of three weeks the symptoms of paralysis amended, the patient commenced to eat, and the voice returned at the same time. When the case was reported, the cure was all but complete; but the treatment was continued because the voice was still affected, and liquids often returned by the nasal fossæ at the moment of deglutition.

This case is remarkable on more than one account. We see in the first place that this severe paralysis

succeeded to a sore throat so mild that the patient did not even stop work. The gravity of the paralysis is also quite exceptional. It is extremely rare to see the paralysis not only involving the soft palate, but even all the pharyngeal muscles, and to be so complete as to abolish its functions. It is also certain that, if this woman had not been fed by means of the oesophageal sound, she would have died of starvation, since the paralysis lasted for some weeks after this mode of alimentation had been begun. Lastly, the good effects of this treatment must be noticed. The continuous current constitutes, indeed, the best method of treatment for paralysis following diphtheria.—*London Med. Record*, April 15, 1877.

#### BELLADONNA IN CORYZA.

A gentleman writes to the *British Medical Journal*:

I have found marked benefit from tincture of belladonna in the most severe attacks of coryza. I would recommend one dose of twenty minims in the evening, about six o'clock; this will stop nearly all the most distressing symptoms, especially the frequent, and, in some cases, the almost incessant desire to sneeze. Another dose of ten or fifteen minims at bedtime will generally have the effect of all but completing the cure. There is little or no inconvenience felt the next morning from the medicine, except, perhaps, a little languor, though, I believe, some people bear belladonna better than others. I can speak highly of its effects on my own person.

#### THE SPONTANEOUS CURE OF CAVITIES IN THE LUNGS.

At a late meeting of the Clinical Society of London, that able observer, Dr. Theodore Williams, exhibited the patient, a middle-aged foundryman, in whom the disease began ten years ago with profuse hæmoptysis, followed by the usual phthisical symptoms. Three years ago a tinkling cavity was detected in the upper portion of the right lung. Since that date he had gained flesh, the cough had diminished, and he had been able to return to his occupation; and, on re-admission into the Brompton Hospital in December, 1876, marked shrinking of the whole of the right chest was noticed. The cavity was found to have contracted, but not to have disappeared, distant cavernous sounds being still audible. The physical signs indicated considerable displacement of the neighboring organs; the left lung was drawn across the median line, and the liver and heart were both displaced towards the contracting cavity. The general health showed corresponding improvement, a considerable amount of weight having been gained. Dr. Williams remarked that the contraction of an amphoric cavity was a very rare occurrence, and that this was a good instance of the various changes in the wall of the thorax, amounting here almost to a deformity and the displacement of the various organs that were necessary to fill up so large a void.

Dr. B. Yeo thought that the fact of there being a contracting cavity in the lung was simply accidental, and not due to any special treatment. He mentioned the case of a clerk in the city, who for twelve years had had a cavity in the lung, but who took extremely little care of himself, going on an omnibus, in all weathers, to and from his daily occupation to Brompton, and in whom, without any special treatment or care, the cavity had greatly contracted.

#### THE OPIUM TREATMENT OF PERITONITIS.

In an article in the *Practitioner*, February, Dr. W. H. Broadbent, physician to St. Mary's Hospital, London, writes:—

It is common in fever, whether enteric or typhus, to have as a complication tympanitis, which may be quite independent of peritonitis or perforation of the bowel. The treatment I have found most useful in relieving this condition is opium. Occasionally the distention of the intestine comes on very suddenly, when it is not only a source of distress and danger but carries very grave prognostic import. My interpretation of the phenomenon is that it is one of the manifestations of nervous shock, and that it indicates paralysis of the sympathetic system, with consequent loss of tone in the muscular wall of the bowel, allowing the distention to take place. It constitutes one of the emergencies to which the Hippocratic maxim applies, and under such circumstances I do not hesitate to give and repeat a drachm of tincture of opium. I can recall to mind many instances in which, by this treatment, the tympanitis has been dissipated in a few hours, with a corresponding improvement in a general condition of the patient.

#### THE USE OF ERGOT IN THE TREATMENT OF PURPURA.

Dr. L. Duncan Bulkley calls attention to the treatment of purpura by ergot, in an interesting paper, the principal points of which are as follows:

1. The treatment of purpura as advised in books is ineffective and tedious in lighter cases, and insufficient to save life in many of the severe or hæmorrhagic cases.

2. Ergot possesses a very decided power in contracting the involuntary muscular fibre, causes divided arteries to contract, acts upon the smaller arteries and capillaries, and has been proved a valuable arrester of hæmorrhage in many affections.

3. In purpura the action of ergot is very manifest, causing, when given in sufficient doses, an almost, if not quite, immediate cessation of the cutaneous and other hæmorrhages.

4. The most effective method of administration of ergot is by hypodermic injection, and this means renders it peculiarly valuable in purpura hæmorrhagica, where there is hæmatemesis, so that its administration by the mouth would be impossible, or in cases where the stomach would not tolerate it.

5. While ergotin, a purified, watery extract, has been advised by many, and has been found to act efficiently in many cases, its action is liable to be uncertain by reason of age or faulty preparation, and after dilution with water it soon becomes inert.

6. Fluid extract of ergot may be administered hypodermically, undiluted, and without local accident, as abscess or inflammation, if care be exercised; and its effect is very prompt and certain.

7. Ergot may be thrown under the skin in any part of the body; the gluteal and shoulder muscles answer well, but the places to be preferred are about the pectoral muscles, or at the sides of the chest, about half-way down.

8. Severe cases of purpura require the frequent repetition even of very large doses, whether by the mouth or by hypodermic injection; both methods may be combined.

9. Generally one or two grains of ergotin, or from ten to fifteen minims of the fluid extract hypodermically, once or twice a day, are sufficient, but the former may be safely increased to five grains and the latter to twenty or thirty minims, and repeated as often as every hour and a half.

10. Larger doses relatively are required when given by the mouth, and their action thus given, is more slow.

11. No fear need be entertained of any untoward effect, an ounce of fluid extract by the mouth, and seven grains of ergotin hypodermically, have failed to give rise to any unpleasant symptoms; and from half a drachm to a drachm and a half of the tincture of fluid extract have been continued for several months without producing ergotism.

12. Other preparations of ergot may be employed internally, as the powder, solid extract, wine, or infusion, the dose being proportioned to the effect required or produced.—*The Practitioner*.

#### REMOVING FOREIGN BODIES FROM THE NOSE.

A correspondent of the *Medical Record* observes, on perusing an account of a discussion on the removal of a button from the nares, that he finds no mention of a very simple procedure which has often succeeded after instruments have failed. It is merely to blow the patient's nose for him by closing the empty nostril with the finger, and then blowing suddenly and strongly into the mouth. The glottis closes spasmodically, and the whole force of the breath goes to expel the button or bean, which commonly flies out at the first effort. This plan has the great advantages of exciting no terror in the child, and of being capable of being at once employed by the parent before delay has given rise to swelling and impaction.

## FOR PALPITATION OF THE HEART.

Dr. Lardies, in *L'Union Médicale*, describes a method by which palpitation of the heart not due to organic lesions may be arrested at once. The patient is directed to bend the body head down, with the arms hanging so as momentarily to cause congestion of the upper part of the body. In all cases of nervous or anæmic palpitations the heart quickly resumes its normal functions. If respiration be arrested for a few seconds while the patient is in the above position, the relief is still more speedy.

## COLD WATER INJECTIONS IN ACUTE RHEUMATISM.

Dr. Dieulafoy, in the *Gazette des Hôpitaux*, states that he has for several years past been in the habit, in acute articular rheumatism, of injecting some ten drops of cold water around different parts of the affected joint, as a means of relieving the pain. The results are most remarkable. The pains abate, and the patient is enabled to move the joint, and in some cases the rheumatism is even cured by this simple means. The same means may be employed also in muscular rheumatism, ischias, &c.

## BROMIDE OF POTASSIUM IN HEART DISEASE.

Professor G. Angrisani finds the bromide a powerful remedy for the functional affections of the heart, whether in regard to frequency, intermittence, or want of rhythm. In a paper in the *Rivista Clinica di Bologna*, he endeavours to show that the bromide has a restraining action on the vaso-motor centres and on the cardiac plexus. This may be the origin of its power to diminish the calibre of the capillaries. It has no action on the cardiac muscular fibres, as digitalis has, which, in its turn, does not act on the vessels. Dr. Angrisani finds it of the highest clinical value in angina pectoris, and in all cardiac neuroses, relieving them rapidly, and the relief frequently ending in complete cure.

## OBSTINATE CONSTIPATION.

The following letter, addressed to a practitioner in this city by a patient, is self-explanatory. It is to be hoped that some of our readers may be able to suggest a convenient and efficacious remedy:

"During my short but eventful career I have punished my share of all kinds and descriptions of ardent spirits. For the past seven months I have not drunk a drop. During all that time, and for the first time in my life, my bowels have been in a state of chronic constipation, and I have no doubt my liver is like a piece of cork. One of your most powerful liver-stirring doses, which would probably nearly physic a horse to death, appears to agree with me, like a suitable meal of victuals, and causes only

one gentle movement, apparently natural. After that, if I took no more cathartic of some kind, I should probably go a year or two without further movement.

"Of course, this is a very convenient state of things, but I am afraid I should eventually fill up, so that my victuals would not taste well, and besides I might die in the summer-time and am afraid I shouldn't keep well. I thought, perhaps, you might prescribe a sort of pill diet, and allow me to break my strict temperance rules by taking one or two castor-oil cocktails before breakfast, with an aloes punch in the middle of the day. I went one whole week, eating nothing but oatmeal, corn-meal gruel, baked and raw apples, etc., etc. It made no difference, and it convinces me that there is something wrong about the organization of my innards.

"If you think my liver is unfit to preside over its department, could you appoint some one of my other vitals '*Liver ad interim*'? Anything you say. I am not one of the kind who always imagine themselves sick; I am well enough any way, but either want some benefit from my numerous bowels, or else I don't want the trouble of carrying them about.

"I shall expect you to charge one visit to pay you for reading this amateur diagnosis, and then if you agree with me that my bowels are of no future use to me, render me a bill, I will pay up, and at once commit harikari."

## FORMULARY.

[Communicated by various practitioners.]

## SOLUTION OF SALICYLIC ACID.

R̄ Acidi salicylic..... ʒ ss;  
Liquor ammon. acetatis.....  
Syrupi limonis..... } aa ʒ ij.  
Aquæ.....

M. Making a clear solution five grains to the drachm, and positively pleasant to the taste.

## IN HEMOPTYSIS.

R̄ Fluid ext. ergot. .... }  
Tinct. opii camphorat..... } aa ʒ  
Syrupi tolutan..... }

M. A dessertspoonful every half hour, p. r. n.

## FOR EXTERNAL USE IN ECZEMA RUBRUM.

R̄ Plumbi carbonatis..... ʒ ij;  
Morphiæ sulphatis..... gr. x;  
Chloroformi..... ʒ ij;  
Glycerinæ..... ʒ ij. M

## AN EXCELLENT AND ELEGANT FORMULA FOR PRESCRIBING GALLIC ACID.

R̄ Acidi gallici..... ʒ j;  
Glycerinæ..... ʒ j;  
Aquæ bullientis..... ʒ v.

M. A tablespoonful *pro re nata*.

## VASELINE AND SALICYLIC ACID IN MEDICINE.

BY HENRY A. DUBOIS, M.D.,

SAN RAFAEL, CAL.

In two former brief papers in this journal I have noticed some of the uses of vaseline and salicylic acid, alone or combined, as an ointment in the treatment of wounds and in obstetrics; in the present I will make some suggestions as to their use in another class of cases. Ulcerations of the septum of the nose are often as much the cause of persistent discharge from the nostrils as erosions of the os uteri are the cause of leucorrhœa. I have seen many cases that, under the care of specialists, have for the time being, been cured, only to break out afresh. In truth, these cases seem to require general as well as local treatment. Looked at from one standpoint, they are but a sign of a general constitutional state. The treatment pursued by most specialists is tedious, requiring the attendance of the patient several times a week for several months before the ulcerations are completely healed and the discharge stopped.

Many of the cases that come to the general practitioner would be satisfied if they could get a partial cure, *i. e.*, be able to control the discharge from the nostrils to such an extent as not to be seriously inconvenienced thereby. It is a question in some of these cases as to the advisability of stopping suddenly a long-continued discharge. The treatment that I have found most convenient for the patient, and at the same time very effective locally, has been the use, night and morning, of vaseline with five grains of salicylic acid added to the ounce. This is introduced into the affected nostril by a camel's-hair pencil, or, better still, by a little cotton-wool wound around the end of a stick. At the same time I give  $\frac{1}{16}$  to  $\frac{1}{8}$  grain of corrosive sublimate with some preparation of iron twice daily. I frequently find that, after this treatment has been continued for one to two months, a complete cure is effected, while in other cases the discharge has so far ceased after a few weeks that the patient, being satisfied, leaves off the treatment. In cases of scrofulous enlargements of the glands of the neck, vaseline, with from ten to twenty grains of iodine and the same quantity of iodide of potassium, makes an excellent ointment. In hemorrhoids vaseline with five to ten gtt. of tar to the ounce, makes a very soothing application to the inflamed piles. Ten to twenty grains of subnitrate of bismuth may be substituted in some cases for the tar, with advantage; of course the portal circulation must at the time be kept unobstructed. In granular lids, vaseline alone introduced into the eye soothes the parts, and has given good results in my hands. If desired, alum, sulphate of zinc, or what I prefer, liq. ferri persulphatis, can be added. I believe that vaseline containing one-half to three grains of salicylic acid will be found useful in purulent ophthalmia. Indeed, the use of these agents in diseases of the eye has received, so far, little attention. In otorrhœa in scrofulous children, the vaseline, with varying proportions of salicylic acid, checks the discharge and relieves all

excoriations caused by it. In granular sore throat the ointment, if applied morning and night with a probang, answers a good purpose, and, I may add, that in diphtheria I prefer to apply the acid with vaseline rather than in solution. Vaseline, in many skin eruptions soothes and protects from the air. Recently I have had charge of a case of small-pox in a child, in which I kept the ointment constantly applied to the whole body, with the effect of apparently entirely relieving the itching; for the child, though of a very irritable disposition, did not break a single pustule on the face by scratching, and recovered without a pit. I should also mention that the secondary fever was almost absent. I do not think I am going too far in saying, that a daily application of this ointment, in cases of small-pox, over the whole body, will not only greatly conduce to the comfort of the patient, but will do much towards reducing the fever of maturation. In cases of poison-oak, I find it to give more relief than any other topical application, and, in connection with vapor or hot-air baths, to effect speedy cures. In cases of burns it answers much better than caron oil. The ointment stimulates the granulations, and, by the addition of astringents, will furnish a good dressing throughout all of the stages of an extensive burn. It answers well as a dressing for chancre. In cases of baldness or loss of hair after fevers, vaseline with twenty grains of quinine and thirty gtt. of tincture cantharidis makes an excellent pomatum. It takes, in many cases, the place of liniments, and can be combined with quite a variety of active medicines. It may be used instead of cod liver oil as an external application in diseases of mal-assimilation, and will not be found disgusting like the former, while it seems to have nearly if not quite as good an effect on the disease. I have used it internally in phthisis, chronic bronchitis, and whooping-cough, and with generally satisfactory results; but consideration of its action when used internally must be postponed until my experience is more extensive than at present.

I will conclude by mentioning a number of little uses in which vaseline will be found to contribute to the comfort of the patient and to the convenience of the physician. It makes a good dressing for blisters; and a more soothing one than any other with which I am acquainted. Added to poultices, it keeps them moist, and, if a little of the acid is added, sweet for a length of time. It is a good vehicle for active medicines when used by the rectum. The vaseline should be slightly warmed, and the nozzle of the syringe large. If introduced in the melted state into the urethra, in cases of difficult strictures, it enables the catheter to enter with great facility. It answers better than mercurial ointment to prevent rust on instruments. I have no experience in its use in gonorrhœa, but I think there can be little doubt that with its soothing and penetrating qualities it would make a good agent for astringents, and with the salicylic acid would tend to abate inflammation and check the discharge. The ointment alone or with tannic acid is a valuable application to bed-sores. I may add that, in blistered feet, and for the



sore backs of horses, it answers well. I have thus briefly called attention to these agents. No doubt most physicians have used them in many cases; but, so far as I know, all of the valuable properties of vaseline, alone or combined with salicylic acid and with other active agents, are not yet fully appreciated by the profession generally, and this must be my excuse for mentioning many of the uses that these agents may be put to.—*N. Y. Medical Record.*

#### THE SURGICAL TREATMENT OF EMPYEMA.—

There are a few cases which cause more anxiety to physicians than patients suffering from empyema, and we fear that uncertainty as to the best mode of treatment considerably aggravates this anxiety. Time is often wasted while half measures are being tried and found to fail; and sometimes it is only as a *dernier ressort*, when the patient's strength is exhausted and the case is desperate, that the true curative treatment is adopted. When the existence of pus within the pleural cavity has been established there can be no doubt of the necessity for its evacuation. The question remains, how can this best be accomplished? Aspiration is the easiest method, and in children is frequently very successful; for any pus that remains after the operation is not unfrequently absorbed, and masses of lymph become organized. But in adults we do not meet with these favorable results; the hopes excited by the immediate relief following the aspiration are only to commonly dissipated by the evident signs of resecretion of pus. The fact is that the aspirator never completely empties a chest, and the fluid left behind is neither absorbed nor organized, but causes further suppuration. The other plan of making a free opening into the chest low down completely evacuates the pus, and allows of the gradual obliteration of the pleural cavity by the expanding lung, collapsing walls, and displacement of adjacent viscera; and it offers the only chance of cure in the great majority of cases of empyema in the adult. But there is a dread of this operation in the minds of many, owing to the evil results not unfrequently attending it: prolonged suppuration, destroying life by hectic, albuminoid disease, or acute tuberculosis; or decomposition of pus, with consequent blood-poisoning. Here it is that we think the antiseptic treatment can be employed with the happiest results; for it has been in cases of large abscesses that its most decided triumphs have been won. Where only pure non-irritating air is admitted to the pleural cavity the suppuration at once or soon ceases, and the patient escapes the danger of blood poisoning. A drainage-tube should be employed, and care should be taken that it be past just into the pleura; but it is unnecessary that any of the tube should be free in the cavity. Several cases are on record where these tubes have slipped into the pleura, and have given rise to trouble in extraction. This accident can be quite prevented by adopting the simple expedient of transfixing the outer end of the tube with a harelip pin, which crosses the wound and effectually prevents the tube passing in; and if

the ends of the pin be secured to the chest by strapping, it equally prevents the tube being forced out of the opening. The tube should not be withdrawn until all secretion from the pleura has ceased.—*Lancet.*

#### HYGIENE OF THE FEET.

Thomas F. Rumbold, M. D., of St. Louis, Mo., contributes the following to the *Virginia Medical Monthly*:

"Cold feet predispose to colds in the head, throat, and ears. It is almost useless to treat a patient for a catarrhal condition of these organs if the feet are not kept warm. No external influence so certainly causes a congestion of the mucous membranes of the respiratory organs as cold and wet feet."

"It is frequently the case that wearing woollen stockings will cause the feet to perspire; they are then liable to become cold. Should this be the case, a thin pair of cotton stockings should be worn under the woollen stockings. It will be well for those patients who have cold feet, whether damp or not, to wear their stockings in this way; that is, to draw on a pair of woollen stockings over a pair of cotton stockings. Neither of the pairs need be very thick."

"A good remedy for cold and damp feet is to bathe them at bed time. For many years I have advised my patients, when taking this bath, that they should after undressing wrap a blanket around the body from head to foot, the room being warm; then sit on the side of the bed and immerse the feet in a sufficient quantity of water, heated to blood-heat, to cover the ankles, having the blanket at the same time wrapped around the limbs and foot bath tub."

"The position upon the side of the bed has two advantages: the patient, in being near the bed, will be able to get under the bed-clothes without the loss of the warmed air inclosed around his limbs and body by the blanket; again, in this position, the body will be more erect than it would be if the person were sitting upon a chair; consequently more of the limbs will receive the warmed and moist air from the bath-tub—two adjuncts necessary to a successful foot-bathing."

"After the feet have been in the warm water about three minutes they should be raised out of the tub, and one pint of boiling-hot water poured into the bath. The feet should then be immersed again about three minutes longer; at the end of which time a second pint of hot water should in the same manner be added to the bath; and, with the same interval, a third, fourth, or more pints should be added, till the water in the bath-tub is as warm as the patient can bear it. After the feet have been in the water in all about fifteen minutes, they should be dried by being well rubbed with a coarse towel, and then an innunction should be applied with considerable friction. Lastly, they should be covered with a pair of cotton stockings, well warmed. The drying and anointing should be done while the feet are held over the bath-tub and inclosed in the blanket. The patient should get into bed completely

enveloped in the blanket. For many years I have used an ointment for the feet with and without bathing; it assists in preventing them from sweating and from being cold. During the last two years I have employed 'vaseline' as an inunction. It is far superior to any of the oils or cerates in common use.

"By the time the feet are bathed in this way the body will be in a gentle perspiration; this should be allowed to dry gradually, after which the blanket may be removed.

"If there is fetor from the feet, salicylic acid and bromide of potassium (aa grs. v ad.  $\frac{3}{4}$  j of 'vaseline') will in a few bathings and anointings correct this condition. Plunging the warm feet in cool water immediately on getting out of bed in the morning has frequently a good effect.

"A large majority of females fasten up their stockings by elastic garters. Girding the limbs in this way is very liable to induce cold feet on account of impeded circulation; the veins being so much compressed by the garter that the blood can not leave the limbs so readily as it should do, while the heat forces the blood to them through the arteries, whose walls are firm enough to resist the pressure of the garters. Almost every patient will claim that her garters are not tight; yet most of them will acknowledge that when the elastics are removed at night, the creases under their knees, caused by the constriction of the garter, are deep enough to bury half of the thickness of the finger. In order to maintain the hose in their place without the aid of garters of any kind, they should be pulled on over the stocking-knit drawers and fastened with tapes. Four of these tapes, about six inches long, should be sewed on the drawers at about the middle of each thigh, one on the outer side and one on the inner side; also four tapes of the same length should be sewed, one on the outer and one on the inner side of the top of each stocking. The tying of the four pairs of tapes secures the hose in their place, and, as they are long enough to come above the knees, more of the limbs are then covered than when they are held up by the strangulating elastic or non-elastic garters.

"Boots that are thin or tight, and shoes that are low in the ankles should be avoided in cold or damp weather. Heavy, loose-fitting boots, with double uppers and soles, the latter made wide, are the proper coverings for the feet in cold or damp weather. India rubber overshoes should be worn in wet or damp weather only, and they should be removed from the feet as soon as the wearer enters the house. Slippers should not be worn by either sex during cold or even cool weather. One of the ways in which a cold is *mysteriously* (?) contracted is to exchange a pair of warm boots for a pair of low slippers. Those who do this had forgotten that their feet and ankles had been protected all day, and that they have not only uncovered them but placed them in the coldest stratum of air in the room. If they had taken the precaution to draw on over the stockings which they usually wear a pair of heavy woollen socks, the chances for taking cold from wearing the slippers would have been greatly decreased."

## COUGH MIXTURE IN PHTHISIS.

R Mist. amygdal dulc.....  $\frac{3}{4}$  ij;  
Fl. ext. glycerh..... 3 viij;  
Mucil. acaciae..... 3 viij;  
Potassi cyanidi..... gr. ij;  
Acidi citrici.....  $\mathcal{O}$  j;  
Morphiae acet..... gr. ij;  
Spts. nitrosi ether..... 3 vij;  
Syr. sanguin Cand..... 3 iij;  
Ext. prunus virg., g. s. ad...  $\frac{3}{4}$  viij. M.

Sig. Dessertspoonful every three or four hours.

I find this generally moderates the cough, exerts a very beneficial influence on the bronchial mucous membrane, and improves rather than deteriorates the digestive function.

In more advanced cases I often give the following mixture. It is both tonic and pectoral, and furnishes an excellent mode of giving quinia, as its taste is almost entirely concealed:

R Mist. glycerh. comp.....  $\frac{3}{4}$  iv;  
Fl. ext. prunus.....  $\frac{3}{4}$  ij;  
Acidi hydrocyanici..... 3 ss;  
Quiniae purae..... 3 ss;  
Morphiae sulph..... grs. iij;  
Syr. picis comp., g. s. ad...  $\frac{3}{4}$  viij. M.

Sig. Dessertspoonful every four hours. To this I often add either the chloride or the phosphate of ammonium.

The following combination of Prof. DaCosta forms a fine combination:

R Morphiae acet..... gr. ij;  
Potassi cyanidi..... gr. j;  
Acidi acetic dil..... 3 j;  
Ext. prunus virg.....  $\frac{3}{4}$  ij;  
Mucil. acaciae.....  $\frac{3}{4}$  ij. M.

Sig. Teaspoonful thrice daily.

A combination of this kind, however, is more especially adapted to non-inflammatory coughs with free but yet not abundant expectoration. I, however, prefer the following one of my own:

R Syr. picis comp.....  $\frac{3}{4}$  ij;  
Potassi cyanidi..... gr. iij;  
Morphiae acet..... gr. ij;  
Fl. ext. hyosciami..... 3 ij;  
Vini ipecacae..... 3 j;  
Syr. tulut.....  $\frac{3}{4}$  iv;  
Ol. sassafras..... gtt. x. M.

Ft. Sig. Teaspoonful four or five times a day.

When the cough is convulsive, with stridor and wheezing breathing, we find our best therapeutics in belladonna, stramonium, cannabis indica, and the bromides. The following, a favorite of Dr. Williams, of the Brompton Hospital, often acts well:

R Ammonii bromidi..... } aa 3 jss;  
Chloral hydrat..... }  
Syr. papav.....  $\frac{3}{4}$  ss;  
Aqua menth. pip., q. s., ad...  $\frac{3}{4}$  vi. M.

Take an ounce every two or three hours.

—Dr. Polk, in *Ohio Medical Journal*.

## CLINICAL LECTURE ON GOUT.

(Delivered in the Amphitheatre of Bellevue Hospital, New York.)

By WM. M. POLK, M.D.,

Professor of Materia Medica and Therapeutics, and Clinical Medicine, in Bellevue Hospital Medical College, New York.

(Phonographically reported for *The Hospital Gazette*.)

GENTLEMEN,—A casual glance at either of the patients I bring before you to-day is sufficient to shew that they are suffering from some form of articular disease. In seeking for a cause of the trouble, two conditions suggest themselves, namely: rheumatism and gout. As regards their differentiation, we can very soon determine the matter here by enquiring into the history of the cases. We will take the first patient.

He says he is 38 years old, and, up to the time he was 35 enjoyed most excellent health. In addition to this, his habits were very good, never using spirituous or fermented liquors until he was 25, and even after that time, only in moderation.

His occupation up to about ten years ago was that of a school teacher, but since he has been in this country (ten years) he has been an ordinary laborer, thus living out of doors a considerable portion of his time, where he could get a free supply of oxygen.

When he was 35, that is three years ago, he was suddenly seized after exposure to cold with sharp pain in the knees, and later the metatarsophalangeal joints of the great toes became involved. Other joints were likewise affected. He was confined to his room for five or six weeks, but did not suffer an unusual amount, being at the end of that time quite free from his difficulty. One year elapsed when he was seized with another attack similar to the first, and following exposure to cold. This seizure was limited to three weeks. This winter in January, he had another attack quite like the two previous. When he entered the hospital the joints chiefly affected were the metatarsophalangeal of the great toes, but that of the left was worse than that of the right. He was entirely free from perspiration and the heart was not at all involved.

When we came to look at the metatarsophalangeal articulation of the left great toe we found it ankylosed and more sensitive than any other joint. The cartilages of the ears exhibited small deposits, which on examination were found to be urate of soda. The joints of the fingers likewise showed deposits of the urates, especially about the articulations of the second and third phalanges, and, moreover, one had opened and was discharging a material which was found to consist principally of urate of soda. This point settled the question definitely, for under these circumstances, the dis-

ease could, by no possibility, be rheumatism. You can still see the enlargement of the finger joints and the deposit in the cartilages of the ears.

My reason for calling your attention specially to this case is that the attacks so closely resembled rheumatism in that the larger joints were primarily involved, and yet the subsequent history, with the joint lesions present, all show the characteristic development of gouty disease. Now the patient shows the chronic steps of the disease.

As to the second patient, he is about the same age as the first, but a shoemaker, working many hours out of the twenty-four in badly ventilated quarters. His habits are fair, and he indulges but little in either fermented or spirituous drinks. The first patient was a moderate beer drinker, but this, not. The family history of both seems to be free from any suspicion of the gouty vice.

Here the patient was at the first (three weeks ago) seized with sharp lancinating pain in the metatarso-phalangeal joint of the right great toe. A great deal of inflammatory swelling was developed and with it constitutional disturbance. No other joint became involved, and, in the course of two weeks, he felt comparatively well.

The swelling about the toe and top of the root is still quite considerable, as you can readily see. One point just here I wish to call to your attention is this—the swelling around a small joint affected with gout is generally much more extended than when the inflammation is rheumatic.

This man presents no other evidence of gout than is shown by the history and present appearance of the affected joint. At the present, we class his ailment as acute gout, but sooner or later he will pass on to the region of the disease occupied by the patient just shown you.

In cases of chronic gout, if we wished to push the investigation further because of the scarcity of diagnosis points, we might resort to the test for uric acid in the blood. In order to do this, we simply extract half an ounce or an ounce of blood from the patient, or we may use the serum taken from a vesicated surface. Taking the blood or serum, as the case may be, and adding a small quantity of acetic acid, we allow it to stand for a time, then place in it a few shreds of cotton fibre. After the lapse of eleven or twelve hours there would be found on these shreds a deposit of crystals of urate of soda, an evidence that this salt exists in unusual quantity in the circulating fluid.

In the first case there is a chance that the kidneys have become involved, for this is likely to happen when the disease has continued for a length of time. We find in such cases what is called the gouty or contracted kidney. The quantity of urine passed in twenty-four hours

is increased, while the uric acid and urea is very much decreased in amount. In the present instance this patient passes sixty ounces a day, which is more than normal, while the specific gravity is low. This specimen is free from albumen, but you ordinarily expect to find in these cases a light deposit. If this patient were to take a slight cold you would then discover albumen in his urine. Though there is none present now, the other characteristics obtain, and we are, I think, justified in believing that this man has the gouty kidney.

But now let us look a little beneath the surface and endeavour to see what all these various changes can be traced to. The writers on this subject may be divided into two classes, those who hold that there is nothing behind the local manifestations, and those who go beyond this and look to the blood to find a primary disorder. A great many different hypotheses have been offered at various times, some with and others without plausibility, but all of them are merely different interpretations of some undisputed manifestation of the disease. Most authors, however, seem to be agreed that it is due to sub-oxidation of the albuminous substances introduced into the circulation. The suboxidation depends on one of two conditions, viz., an over supply of albuminous substances, or an under supply of oxygen.

The first condition is illustrated by a person who habitually eats and drinks freely and exercises but little, and the second by one who is habitually confined to badly ventilated quarters and yet may not eat excessively.

The attempt has been made to show that the origin of the gouty vice in any one person is in the liver.

Assuming as a fact that the liver is the point where urea is formed. The problem is worked as follows: functional derangement of the liver prevents the complete conversion of the albuminoids into urea. The process of oxidation essential to that conversion being stopped at the uric acid point instead of continuing to the urea point.

Uric acid and the urates steadily accumulating in the blood are, after a time, deposited in cartilaginous structures, especially about the small joints; as a result you have gouty inflammation with the attendant fever set up, in other words you have an attack of acute gout. During the fever the increased oxidation entering into that phenomena leaves out or destroys the excess of the urates, leaving the patient's blood purer.

In this way is explained the fact that patients always feel relieved after an explosion of gout. Their blood being purified, they feel better in all respects.

The entire theory is certainly very fascinating, and in the place of a better may be accepted for the present.

Persons who have inherited or acquired the gouty diathesis may have a great number of manifestations of the disease, without developing any characteristic joint affection.

Some who have the diathesis, will, after an ordinary indulgence in wines, etc., complain of an ill-defined soreness over the kidneys, and have frequent calls to urinate, the water being loaded with urates.

A distinguished actor of this city, who suffers from inherited gout; after the slightest indulgence, is afflicted with severe soreness in the heels, extending as far as the tendo Achilles. He can be cured each time by the usual gouty treatment.

These patients are very much subject to indigestion of some kind, principally acid dyspepsia.

The diathesis may be present for years, without anything other than indigestion as a manifestation, this occurring particularly after the drinking of certain wines.

Whenever you have a patient the victim of any of the manifestations of prolonged gout, invariably examine the urine, to see whether the symptoms may not only be due to increased production of uric acid in the blood, but to renal disease as well, this latter preventing the proper elimination of urea and urates, which, as you are aware, is as surely followed by disastrous results. I think, in many cases, you will find casts and albumen. You may not discover them at first, but you will assuredly find an increased amount of fluid, with a low specific gravity. If I had carefully followed this precept in a case under my care during the last year, I should have been spared from deep mortification. My patient suddenly passed into uræmic coma from which she never came out. There was advanced renal disease which was then discovered on a second and third examination of the urine. I knew the patient had inherited gout, and was suffering from an acute attack of gouty bronchitis; but had the urine been examined more than once, I would have known more.

In some persons there is a special tendency to bronchitis, which supervenes on the slightest exposure to cold. These cases will more frequently respond to gouty treatment than to the expectorant plan which is adapted to average cases of bronchitis. In special cases there is some neutral trouble, usually sciatica, which may be directly traced to gout. A large number of skin diseases, especially the scaly varieties, as psoriasis and eczema, call for the administration of gouty remedies.

I have at the present time a patient who shows a remarkable and rare development of the gouty diathesis, so rare, in fact, that for some time I was in doubt as to its exact nature.

The person had had burning sensations in the palms of the hand and soles of the feet, from time to time, but as there was never any swell-

ing to be detected, and no evidence of any lack of her usual health, I paid but little attention to the case. One day, however, she asked an explanation of certain sudden swellings occurring in the soft palate. They would disappear in a few hours as rapidly as they had come. My suspicions being aroused, I found that occasionally the swellings instead of coming in the soft palate, would show themselves on the cheek on a line with the mouth, never higher than the malar bone, and always on the right side. They were about the size of a pigeon's egg, hard, but not inflammatory, not even tender. Once or twice some discoloration of the skin remained for a few hours after their disappearance. I examined the urine and found that possessed of the characteristic peculiar to the gouty kidney. The patient was the victim of that form of renal disease, but the swellings were due not to that fact, being rather direct expressions of the gouty dyscrasia.

The symptoms that I have enumerated constitute the chief manifestations of the gouty diathesis, and having already alluded to the causes, we will now turn to the question of treatment.

The treatment of gout may be divided into that appropriate to the acute development of the disease, and that which should be employed in chronic forms. First, as to the acute forms. The seizure usually takes place during the night, and the first essential element in treatment is to secure freedom from pain by anodynes. Let the patient have rest in bed and make some application to the joint, such as extract of belladonna. If the inflammation be considerable, use hot applications. The patient will usually object to cold applications as he believes they will drive the disease to the heart or brain. Elevate the limb and administer colchicum.

I look upon the use of this drug as most important. The wine of the seeds is the best preparation, and you may give it in doses of ten or twenty minims or even thirty, every three or four hours until the action of the remedy is obtained. It does not do to leave these cases without active treatment, unless they are much enfeebled already, as you may have ankylosis of the affected joints resulting. Measures of this kind are usually sufficient to cut short the disease. Do not let the patient walk as long as any tenderness is left. After the acute attack put the patient on alkaline waters, Vichy being as good as any other. It contains from forty to forty-five grains of bicarbonate of soda to the pint. With Vichy we get the good effects of the alkali as well as of the water itself, which acts as a diuretic and aids in getting rid of the excess of uric acid and urate of soda. Soda has some action on the liver and enables it to perform its functions in a better manner. In addition we get good effects on the digestive

system from Vichy and other alkaline waters, so that in more than one way it does good.

In the chronic forms of the disease rely but little on colchicum, though it may be used carefully to control any active outbreak.

Use the milder alkaline waters, and see that the bowels are kept in good condition. The granulated Carisbad salt is very good for this purpose in such cases, giving a teaspoonful or two in a glass of water before breakfast.

Bitter tonics are to be used to aid digestion, and the blood is to be fortified by the free use of iron, and let me repeat it here, keep your eyes on the kidneys of your gouty patients.

The diet is a most important element to be attended to. The patient should be strictly cautioned to avoid fermented liquors and particularly fermented wines.

If it be necessary to prescribe stimulants, let the patient be restricted to spirituous liquors, as they act best and do least towards increasing the trouble. Brandy, gin or whiskey, with Vichy, may be taken with the meals. It is likewise very important that the sthenic cases be kept from too free indulgence in animal food, particularly in acute cases, the patient should be confined to a farinaceous and mild diet. Sweets should always be avoided. In the chronic forms we must not curtail the diet to too great an extent, and a free indulgence in animal food does not seem to have the same bad effects as in the acute cases.

Encourage your patients to live as much as possible in the open air, take as much active exercise as their strength will permit.

By applying these general remarks and treatment to such cases as you will meet with, I think you will find yourself in the proper path to their correct management.

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## THE CANADA MEDICAL RECORD

### A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D. L.R.C.P., LOND.

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MONTREAL, JULY, 1877.

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## THE TRI-ANNUAL MEETING OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF QUEBEC.

In another column we give the names of the forty Governors, who, on the 11th of July at Three Rivers, were elected to conduct the business of the College for the ensuing three years. Of these forty Governors, eight were delegates from the various Medical Schools at present existing in the Province, so that, in reality, but thirty-two were elected. It is true that the



names of the School delegates were introduced on the voting papers, but we think that it was a mistake so to do. We wish, however, that we could add that this was the only mistake that was made. We could not in truth make such a statement, for the greatest mistake of all was the demonstration of a strong national feeling upon the part of a large number of the French Canadian members. There was, of course, many noble and well marked exceptions, and these stood out in bold relief, only making the action of those who controlled the meeting for their own good, appear most condemnable. Among the retiring Governors there were many whose re-election was to have been expected. They were representative men, whose reputations are not confined to the city and district where they practice their profession, but who are known and respected, over the entire of our vast Dominion, and who have helped to give to Canadian Medicine the standing which it occupies in the eyes of the American Medical world. Considerations such as these should have had their weight, had not a spirit, much to be deprecated, swept all before it, and these good men were left in a minority. There was an almost wholesale annihilation of the English element on the Board, and also of that portion of the French element which for many years has worked so harmoniously with them. Out of the thirty-two *really* elected Governors only six were English, which, with four representatives from English Schools, gives a total of ten English Governors. It is true that if we are simply to have numerical representation, perhaps this number may give us our correct quota, but we claim that it was not only unfair, it was unjust to drive from the Board some of the very men, who have done so much to bring Canadian Medicine to its present high standard. At the same time we claim that the influence the English Medical profession exerts in this Province was worthy of consideration in this matter. No one can deprecate more than we do, the introduction of the national element in matters of this kind, and, if it were at all possible, we should have left the matter drop. We feel, however, that the introduction of this element was not the wish of a very large number of our French Canadian friends, whose votes were used for this purpose. Elections in the very nature of things, must be unsatisfactory

to some one, but, when elections can be conducted by proxies, it can at once be understood how a few active men can carry things in their own way, and which, in the very nature of things, may be in direct opposition to the wishes of those, who unknowingly and unthinkingly have been used as a means towards an end. That this was the case at Three Rivers, at all events with some of the proxies, is, we are assured, the fact. We therefore hold the majority of our Canadian friends guiltless in this matter, and place the blame, where we believe it lies, viz., on the heads of a few misguided young men, who, enthusiastic with a mistaken zeal, have driven from the Board some of the very men whose ripe age and experience was well qualified to give tone to the new College. For over thirty years the old College conducted its affairs without the introduction of this unfortunate question—both Nationalities working together harmoniously—nor would it have come up at the last meeting, had not the zeal of a few outrun their discretion. Conservatism in Medicine is a policy which cannot be too much admired. Already we have seen the folly of at least one of the democratic clauses of the New Medical Act. Time will, we trust, wear away the irritation which this election has produced, but if the *entente cordiale* of the profession in its entirety is to be maintained, the profession must take the next election in its own hands, or be sure their proxies will not be used to bring about results they cannot approve of.

#### APPOINTMENTS, HONORS, ETC.

It is rumored that the vacant position of Surgeon to her Majesty in Scotland, held by Prof. Lister, will be given to Dr. George Macleod, Professor of Surgery in the University of Glasgow. Mr. Brodis's bronze statue of the late Sir James Y. Simpson was unveiled in Edinburgh, May 26th, and is spoken of very highly as a work of art.

#### HUMAN MILK ON SALE.

It strikes the European as a singular fact that human milk can usually be obtained without difficulty in China. In the native city of Shanghai, it costs at present about twenty cents for half a pint. Dr. Mackenzie, of Ningpo, says that he has frequently seen the native women milking their breasts into small basins, in the streets of the native city and foreign settlement of Ningpo. It is esteemed

by the Chinese as a nourishing food for old people, and consumptives.

#### PROFESSOR LISTER.

This distinguished teacher has at last yielded to the solicitations of King's College, London, a chair of Clinical Surgery having been created for him and thirty beds placed at his disposal. The chair of Systematic Surgery, originally offered to Prof. Lister, and which he refused, is still vacant.

#### VICTORIA MEDICAL FACULTY.

We have it on very good authority that negotiations have been going on for some time between the Montreal School of Medicine and Surgery (now affiliated with Victoria College, Cobourg,) and the University of Laval, Quebec, with a view of the former becoming the Montreal Medical Faculty of the latter. It is believed that the negotiations will shortly be brought to a satisfactory termination.

We have received the annual announcements of the Medical Faculties of the Universities of McGill and Bishop's. Both these Calendars give the changes which the new Medical Act of the Province of Quebec requires in the curriculum of students. We have already alluded to these changes, but refer those interested to these Calendars for details. The Calendar of McGill can be had from Dr. Osler, the Registrar of the Medical Faculty of that University, and that of Bishop's University from Dr. F. W. Campbell.

*Transactions of the American Gynæcological Society*, Vol. I, for the year 1876. Boston: Published by H. O. Houghton & Co., Cambridge. Riverside Press.

This elegant volume is now offered to the profession as the fruit of the first year's work of the Society. The typographical and binder's work is faultless, and the table of contents shews that a large addition of valuable information is presented to the reader.

The objects of the Society are meritorious, and, should these objects be honestly pursued, the success of the Society will be assured. Without dwelling upon or referring to the birth of the Society, or the necessity there seemed for its existence, we will pass to the table of con-

tents. The President, Dr. Barker's address, is well suited to the occasion, and exhibits the broad views and generous warm-heartedness of one so deservedly held in high esteem by his professional brethren.

The first paper on "The Etiology of the Uterine Fluxes, with the Proper Mode of Treatment Indicated," is deserving of the careful study of Gynæcologists. The author presents the records of 2,447. The result of flexions upon sterility are carefully examined, and the author finds that "the female who has been impregnated is rarely found with a flexure of the cervix, and, in comparison with other women, is little liable to flexures of the body."

"The proportion of different flexures of the body to one another was 55 per cent. for the forward to 17 per cent. backward, and 26 per cent. for lateral deviation." This conclusion gives a much larger percentage of antiflexures than were generally supposed to exist. Our space does not permit of dealing with many other valuable deductions, nor of the treatment commended. The paper was followed by a most valuable discussion, in which Dr. R. Barnes, of London, Dr. White of Buffalo, and other distinguished Gynæcologists took part.

The paper by Dr. Skeene on "Cicatrices of Cervix Uteri and Vagina" is one of much merit.

"Extirpation of the Functionally Active Ovaries, for the remedy of Incurable Diseases. By Dr. Robert Batty."

The writer of this paper gives the record of some ten cases, where this operation has been made. The results, though in some cases satisfactory, are hardly such as to bring the operation in much favor with the profession. The first performance of the operation must be conceded to the author, although similar operations were made in Canada before the published records of these cases were known.

Dr. Matthews Duncan presented a very interesting and instructive paper "On Central Rupture of the Perineum," in which he speaks of the various forms of rupture, and especially draws attention to the fact that "a central rupture of the perineum may take place without all the tissues being torn, or without a new artificial passage into the vagina being made.

The central perineal rupture may affect only the skin, and that only partially—that is, a split

or crack. It may affect the skin only, the sub-jacent cellular tissue being exposed. It may affect the vagina only. Lastly, it may affect skin and mucous membrane and the tissues immediately adjacent, while there remains entire some tissue intervening between the skin and vagina.

Dr. E. W. Jenks, of Detroit, gives an interesting paper on *Viburnum Prunifolium*, in the Treatment of Diseases of Women. The part used is the bark of the root. "It is (said to be) particularly valuable in preventing abortion and miscarriage."

Dr. T. Parvin, of Indianapolis, relates a very interesting case remomenia, or vicarious menstruation.

Dr. Robert Barnes, London, gives a most interesting paper "On the relations of Pregnancy to General Pathology." The paper is so full of original thought that it is impossible satisfactorily to give an abstract.

"The Spontaneous and Artificial Destruction and Expulsion of Fibrous Tumors of the Uterus," by Wm. H. Byford, M.D., Chicago, is a paper of exceeding merit. The author illustrates the subject with a number of cases. His theory is to "administer ergot for the cure of fibrous tumors of the uterus by compression or expulsion." The blood supply is cut off by compression. The amount of success depends upon the position of the tumor in the muscular walls of the uterus. The nearer such growths are to the inner surface the more amenable are they to this form of treatment. An interesting discussion followed. The novelty of the treatment, and the success it has achieved, commend it to the Gynecologist as another weapon for combatting the disease.

Dr. T. G. Thomas, New York, reports "A case of Abdominal Pregnancy treated by Laparotomy," in which the importance of leaving the placenta in situ is illustrated and insisted upon.

Henry F. Campbell, of Augusta, Ga., presents an interesting paper upon the "Pneumatic Self-replacement in Dislocations of the gravid and non-gravid Uterus." The advantages of the genu pectoral posture is insisted upon.

1st. For examination of the ossa and linea innominata. 2nd. Conducting the hand through the pelvis. 3rd. For applying the forceps from

behind. 4th. In turning. 5th. For hernia and prolapsus, from the third to the seventh month. 6th. For replacement of retroversions, retroflexions and inversions. 7th. For introducing the catheter. 8th. For accelerated labor, and also for the passage of the stools when prolapsus of the rectum is to be feared. Injections are easily given in this posture.

Wm. L. Richardson, of Boston, gives a paper upon the value of hydrate of chloral in obstetric practice.

James R. Chadwick, M.D., of Boston, relates some cases of "Labor complicated with Uterine Fibroids and Placenta Prævia," also a very interesting paper on "Umbilical Hernia in the Fœtus."

Emil. Noeggerath, M.D., New York, gives a very interesting paper on *Latent Gonorrhœa, especially with regard to its influence on fertility in women*. The conclusions of the paper are very novel and startling, and, I may safely say, by no means accepted by the profession. They are as follows:

1. Gonorrhœa in the male, as well as in the female, *persists for life* in certain secretions of the organs of generation, notwithstanding its apparent cure in a great many instances.

2. There is a form of gonorrhœa which may be called latent gonorrhœa, in the male as well as in the female.

3. Latent gonorrhœa in the male, as well as in the female, may affect a healthy person either with acute gonorrhœa or gleet.

4. Latent gonorrhœa in the female, either the consequence of an acute gonorrhœal invasion or not, if it pass from the latent into the apparent condition, manifests itself as acute, chronic, recurrent perimetritis, or ovaritis, or as catarrh of certain secretions of the genital organs.

5. Latent gonorrhœa, in becoming apparent in the male, does so by attacks of gleet or epididymitis.

6. About 90 per cent. of married women are married to husbands who have suffered from gonorrhœa, either previous to or during married life.

Dr. Noeggerath justly remarks, after the discussion of the paper, that "The theory which I propose requires careful study, and a great deal of experience for its recognition."

Dr. Alfred Wiltshire, of London, Eng., gives

a paper "On Death from Urinemia in certain cases of Malignant Disease of the Uterus.

Wm. Goodall, M.D., Phil., gives a "Clinical Memoir on some of the Genital Lesions of Child-birth." A most instructive paper upon a very practical subject. The immediate operation for ruptured perine was favored by the writer, as well as those who discussed the subject.

"Hermaphroditism" is the title of a paper by Lawson Tait, F.R.C.S., Birmingham, Eng.

George Bixby, M.D., Boston, gives an interesting paper on "Cases of Cystic Tumors in the Abdomen and Pelvis."

E. Randolph Peaslee, M.D., LL.D., New York, gives a paper upon "A Case of Solid Uterus Bipartitus; both ovaries removed for the relief of epileptic seizures, ascribed to ovarian irritation. The case terminated in death three days after the operation, which was made through the abdominal walls.

Henry F. Campbell, M.D., Georgia, gives an interesting paper upon the "Origin and History of Calculi found in the Bladder after the cure of vesico-vaginal fistulae." The writer thinks that in many cases the stone exists in the bladder, and assists in causing the fistulae during labor, and concludes "that careful examination be made for stone *previous to the closure of the fistula*, in all cases in which the known circumstances attending the occurrence of the accident do not exclude the possibility of its presence in the bladder; and, also, that all patients be sounded for stone before their discharge as cured."

The death of Dr. Gustave Simon, one of the Honorary Fellows of the Society, is most feelingly and ably referred to by Dr. Paul Mundi, of New York. A short sketch of the life and labors of the lamented dead is also given. That by which he was best known to English readers was his admirable paper on Vesico-Vaginal Fistula, which appeared but a short time before his death.

#### PERSONAL.

It is reported that the Chair of Hygiene in the Victoria Medical School of Montreal has been offered to Dr. E. P. Lachapelle.

Dr. Bell (M.D., McGill College, 1877) has been appointed apothecary to the Montreal General Hospital.

—Sir Thomas Watson, M.D., though now in his 86th year, continues to write for the scientific and lit-

erary journals with all his wonted grace and force of style.

Sir Robert Christison, who has been in failing health for some time, has resigned the Chair of Materia Medica in the University of Edinburgh, which he has held with much distinction since the year 1832. Sir Robert, before being appointed to the Chair which he has now relinquished, had filled for ten years that of Medical Jurisprudence.

—Professor Balfour has resigned the office of Dean of the Medical Faculty in the University of Edinburgh, which he has held for upwards of thirty years. This step has not been rendered necessary by any failure of health or power, but by the increasing demands made upon his time and energy by his enormous botanical class, which, like his botanical text-book, is the largest in the world, numbering above three hundred students.

After considerable coquetting, which might just as well have been left out of the programme, Professor Lister has accepted a Professorship in King's College, London.

#### TRI-ANNUAL MEETING OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF QUEBEC.

The Tri-annual Meeting of the above body took place at Three Rivers, on the 11th of July. The attendance of the profession was very large. The meeting was held in the City Hall, and the Chair was occupied by the President of the College, Dr. R. H. Russell, of Quebec. The minutes of the previous meeting, held in 1874, at Sherbrooke, were read and confirmed. A Committee to examine the proxies and receive the votes was named, and they had a laborious duty, for fully five hundred votes were polled. It was decided that any member of the profession who, under the present Act, had registered and paid his annual contribution to the College, was eligible to vote. This, notwithstanding that, as a member of the old College, he might be in arrears. The counting of the votes occupied from three o'clock in the afternoon of the 11th till two o'clock in the morning of the 12th. The following Governors were elected to manage the affairs of the College for the ensuing three years:

#### CITY OF MONTREAL.

Drs. David, F. W. Campbell, Howard, Fenwick, Rottot, Pelletier, Dagenais, Lachapelle.

## DISTRICT OF MONTREAL.

Drs. Church, Gibson, Prevost, Turcot, Paquet, Rivard, Perrault, Lafontaine, Laberge, Ladouceur, Mignault.

## CITY OF QUEBEC.

Drs. Belleau, Lemieux, Sewell, St. George, Marsden, Larue, Ahern, Wells.

## DISTRICT OF QUEBEC.

Drs. Michaud, Marmette, Tétu, Gingras, Robitaille, Rousseau, Collette.

## DISTRICT OF ST. FRANCIS.

Drs. Gilbert, Paré, Worthington.

## DISTRICT OF THREE RIVERS.

Drs. Ross, Badeau, Desaulniers.

On the morning of the 12th such Governors as remained met, and elected the following officers:

*President*.—Dr. Rottot of Montreal.

*Vice-President for Montreal*.—Dr. R. Palmer Howard.

*Vice-President for Quebec*.—Dr.

*Secretary for Quebec*.—Dr. A. G. Belleau.

*Secretary for Montreal*.—Dr. H. Peltier.

*Registrar*.—Dr. Lemieux, Quebec.

## MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

May 26th, 1877.

The President, Dr. G. E. Fenwick, occupied the chair. There being a great deal of general business before the meeting, no paper was read.

Dr. Osler exhibited the following interesting pathological specimens: A blood-cast of a ureter which had been passed by the urethra, causing great horror to the man from its resemblance to a worm. It was nine inches in length, dark-reddish-brown in colour, and wrinkled. The passage of it had been preceded by symptoms of renal colic. A specimen of extensive diphtheritic disease of the larynx, from a patient who had died in the Montreal General Hospital, under the care of Dr. Ross.

Dr. Ross gave an account of this case, in which there were some interesting circumstances. The patient was an adult, upon whom, a few weeks before, an operation for excision of part of the tarsus had been performed. He was very much run down and hectic. He lay in a bed opposite to that of a man with a fistula in ano, which had been operated upon at his own house. There was diphtheria in this man's family, for which

reason, and on account of an unhealthy condition of the wound, supposed to be diphtheritic, he came to hospital. There was a grey slough in the bottom of the wound, which disappeared entirely in two days under an application of a lotion of chloral hydrate. Dr. Ross does not think that this wound was diphtheritic, and looks upon the diphtheria of the other case as a coincidence and not a case of direct contagion. If the wound was diphtheritic, and this was a case of direct contagion, he thinks that diphtheria must be much more contagious than it is generally supposed.

Specimens of coarse and miliary aneurisms of the vessels of the brain, from a patient who had had an apoplectic attack four years ago, and since which time had been epileptic. Latterly, symptoms of softening of the brain had developed. An apoplectic cyst was found external to the left corpus striatum, and on the small arterioles on its wall, and in the neighbouring corpus striatum numerous small miliary aneurisms were found. Two large ones, the size of peas, existed on the vessels of the circle of Willis.

Two specimens of prostatic disease. One, exhibited for Dr. Malloch, of Hamilton, in which the third lobe of the prostate projected from behind the orifice of the urethra, almost completely closing it. The ureters and pelvis of the kidneys were considerably dilated. The other was from a case of stone in the bladder, of Dr. Fenwick's, and presented a number of out-growths from the prostate surrounding and narrowing the urethral orifice. One of them, springing from the left side, was pedunculated, and fitted like a ball-valve into the orifice of the urethra.

A kidney from the same subject as the larynx came, which consisted of a mass of cysts full of caseous pus, evidently tubercular in character.

Dr. Trenholme narrated a case which occurred in his practice. One year ago he had removed the left eyeball for what he thought was malignant disease. Lately the patient returned to him with a growth on the top of the head, situated on the parietal bone of the side on which the diseased eye had been, one inch from the coronal suture. It had no appearance of being malignant. It was painless, and not adherent to the integument. In attempting to enucleate it with a director, he found that the



growth was protruding through the bone. He closed the wound and left it. He thought that what appeared to be the cyst was the dura mater. The growth in the eyeball was dark in color.

Dr. Osler spoke of a case, of which this reminded him, reported in Knapp's work on Intraocular Growths. It was a glioma of the eyeball, which was removed and recurred along the dura mater.

J. D. CLINE, B.A., M.D.,  
Secretary.

#### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL

MEETING HELD June 8th, 1877.

Dr. F. W. Campbell, 1st Vice-President, in the Chair.

Dr. Reddy read a paper on a case of vascular heart disease. The patient, forty-two years of age, had enjoyed good health up to the summer of 1876, was regular in habits, never had had articular rheumatism. Had been treated for syphilis nineteen years ago. Had had a family of five children, all of whom were healthy; wife was healthy. Had always been a very active man in business, and had suffered a good deal of anxiety in business lately, and had exerted himself very much in London, England, in the spring of 1876, at which time he began to suffer from shortness of breath, &c. On June 8th, Dr. Reddy visited him and found aortic obstruction and regurgitation with some dilatation of the heart. The case rapidly went through the consecutive stages of heart disease up to tricuspid regurgitation, and proved fatal in November. Dr. Reddy remarked that the question of the influence of syphilis occurred to him. He stated that he had found present in this case what Durosier had first drawn attention to as occurring in aortic insufficiency, namely, the development in the femoral artery of a reduplicated sound, systolic and diastolic, by pressure with the stethoscope. Naube says, that in marked aortic insufficiency a reduplicated sound is found in the femoral without artificial pressure, which he explains by the fact that membranes begin vibrating audibly during a transition from maximum to minimum tension.

Dr. Osler then read a report of the autopsy. The heart was very large, weighing 23 oz. All the cavities were dilated; the thickness of the wall of the right ventricle anteriorly was  $\frac{2}{3}$  to  $\frac{3}{8}$  in.; tricuspid orifice measured  $5\frac{1}{2}$  in.; pulmonary orifice,  $3\frac{1}{2}$  in.; pulmonary artery, normal; length of the left ventricle was  $4\frac{1}{2}$  inches, the normal length being 2 inches;

the anterior wall was  $\frac{7}{8}$  inch thick; mitral orifice measured  $4\frac{1}{2}$  inches; aortic orifice,  $3\frac{3}{8}$  inches; the aortic valves were incompetent, and consisted of only two segments; there were three coronary arteries; the aorta was dilated, measuring above the valves  $4\frac{3}{8}$  inches, at beginning of transverse portion of arch 5 inches, and at beginning of thoracic portion  $2\frac{1}{2}$  inches. All this portion of the aorta was atheromatous. By microscopic examination the muscle of the heart was found to be fatty.

A short discussion followed, particularly as to the treatment of such cases by digitalis and the use of acupuncture to relieve the anasarca.

Dr. F. W. Campbell remarked that a writer in the *Dublin Medical Press and Circular* had been lately recommending the use of the tincture of digitalis in doses of say xxx. to xl., every four hours as very serviceable, particularly where much hypertrophy existed.

Dr. Hingston spoke highly of the relief afforded by acupuncture, and upon its freedom from danger of producing sloughing or erysipelas if an ordinary round sewing needle were used and not three-cornered needles or cutting instruments.

A vote of thanks to Drs. Reddy and Osler was moved by Dr. H. Howard, seconded by Dr. Hingston.

Dr. H. Howard related a case of violent mania in a subject in whom there was a hereditary syphilitic taint. He had treated the case by iodide of potassium in x. gr. doses three times a day, with a night draught of bromide of potassium 3 iij. and tincture of digitalis m. x. The patient had recovered from his insanity entirely, but had a large tumor in neighborhood of the parotid gland which he was thinking of treating by injections of tincture of iodine.

Dr. Trenholme thought that it would produce sloughing, and suggested electrolysis.

#### MEDICO-CHIRURGICAL SOCIETY.

June 22nd, 1877.

The president, Dr. Fenwick, occupied the chair.

Dr. Osler exhibited a heart from a patient who had died in the Montreal General Hospital, under the care of Dr. Reddy. It was a beautiful specimen of the "button-hole contraction" of the mitral orifice, first described by Corrigan. There were vegetations along the edges of the orifice, and also along the edges of the aortic valves, which were thickened. The case had been one of acute rheumatism with peculiar

brain symptoms, for the explanation of which the occurrence of capillary emboli had been suggested.

Dr. Cline read a paper on Phlegmasia "Alba Dolens." He reported briefly several cases, one occurring in typhoid fever, two in advanced states of cæcæmia, tuberculous and cancerous, one in a state of considerable prostration after obstruction of the bowels, one in a case of large ovarian tumor, one in pyæmia, and one puerperal case, which latter occurred thirty-seven days after the birth of the child. He drew attention to the existence of a blood dyscrasia, as predisposing to the formation of a thrombus, and to retardation of the venous current from the low vitality and feeble hearts in some of the cases, as determining the thrombosis, and, in the case of the ovarian tumor, to the fact of blood stasis, without any cæcæmia causing it. He alluded to the presence of an inflammation of the wall of the veins in all the cases, consequent on the thrombosis, and to the absence of any difference in essential characters between the puerperal case and the other cases, and, while referring to the generally held theory as to the pathology of the affection, that obstruction of the lymphatics was an essential element in a case of phlegmasia dolens, and necessary to explain the white elastic swelling of some cases, stated his impression that an extensive phlebitis alone would account for it.

Dr. Ross spoke of a case which had been recently reported in the *Lancet*, which perhaps threw some light on this subject. It was one of thrombosis of the veins of the penis, accompanied by a tense white elastic swelling, having the cellular tissue distended with a white semi-transparent cedema different from the ordinary red inflammatory cedema. The reporter of the case was convinced that there was obstruction of the lymphatics. It was the same thing probably which caused the peculiar character of the swelling in milk leg. There was certainly something in those cases having the white elastic swelling very different from mere thrombosis.

Dr. Trenholme remarked that there was yet much to be learnt of the pathology of this affection.

There were difficulties to the acceptance of the conclusions come to by Dr. Cline in his paper. One was, that the affection sometimes began in the popliteal (referring to Dr. Cline's

statement that milk leg was due to thrombosis of the femoral, extending from the uterine veins through the hypogastric). The left leg was more frequently affected than the right, accounted for by some by the fact that the position of the head of the fetus was more frequent with the occiput to the left. He agreed with Dr. Ross as to the probability that the lymphatics were involved.

Dr. Shepherd suggested that the fact of the rectum lying to the left of the pelvis might explain the greater frequency of phlegmasia in the left leg. He had seen a case in pneumonia.

Dr. Fuller suggested that if the affection began in the pelvis and extended downwards it would involve the lymphatics, which were so numerous here, and therefore the affection of the lymphatics occurred more frequently in puerperal cases of thrombosis. Doubted if it, the affection did really ever begin below, extending upwards. The obstruction in the pelvis would predispose to obstruction in the veins below.

Dr. Osler remarked that the generally received theory of the pathology of phlegmasia alba dolens was that the lymphatics had something to do with it. In fevers too, the weakened action of the heart and of the muscular movements was attributed to the formation of thrombi in the veins.

Dr. Fenwick thought that, without doubt, simple venous thrombosis and phlegmasia alba dolens were distinct affections. The character of the elastic swelling, with absence of pitting on pressure, was peculiar.

A vote of thanks to Dr. Cline was moved by Dr. Trenholme, and seconded by Dr. Ross.

Dr. Cline narrated two cases of swelled testicle, in which he used the treatment of puncture advocated by Henry Smith, of London. It gave immediate relief to pain in both cases, and they required no other treatment.

Dr. Reddy presented the Report on the Seal and Diploma of the Society.

It was moved by Dr. Kennedy, and seconded by Dr. Ross:—"That the arrangements as to the matter be left in the hands of the Committee." Carried.

The Meeting adjourned.

J. D. CLINE, B.A., M.D., *Secretary*.

#### DIED.

In Belleville, on the 3rd July, after two days illness, Edward G. Henderson, M.D., (McGill, 1874), M.R.C.S., Eng., aged 24 years.

## Original Communications.

*Treatment of Meningitis*, by William Fuller,  
M.D., Professor of Anatomy, University of  
Bishops College.

Gentlemen, with a view of provoking a discussion on an important subject,—the treatment of cerebral meningitis, I beg to submit some observations made in a few cases which I am sorry to say were not preserved by a daily record at the time. I do not intend to state more than the impressions derived from a moderate experience, and the results in general of certain procedures in treatment.

The stages of this disease are described as, 1st, that of cerebral excitement; and, 2nd, coma as the result of effusion, causing compression of the substance of the brain and death from general paralysis. In my experience the P.M. examination revealed in the great majority of cases not what I should expect from the theory of these stages. It is observed in only a comparatively few instances that the cavities of the brain are greatly distended by effusion, while in the majority only a small quantity of fluid is found in the ventricles and a semi-solid lymph is seen in the sub-arachnoid spaces, particularly at the base, which was insufficient to account for the coma as resulting from compression. In one case, which exhibited all the signs of compression from effusion, and the fontanelle was very prominent, a trocar was thrust into the lateral ventricle two days before death and no fluid escaped, nor were any other symptoms produced by the operation.

In reflecting upon this, and, also, by observing the effect of remedies in this condition, I am led to conclude that coma, in most cases, is not a paralysis resulting from interference of the nerve centers by compression, but by irritation which may be either at a distance, or, in the meninges themselves, centric. The former peripheral irritation—*spurious*, the latter centric—true meningitis—between which it is often very difficult to distinguish, and impossible, unless some distant cause, as worms, &c., is discoverable as a cause. As to the results of irritation on the

different organisms, they may be arranged as follows:

|                    |              |              |
|--------------------|--------------|--------------|
| On Brain producing | 1 Excitement | 2 Coma       |
| “ motor-nerve “    | 1 spasm      | 2 paralysis  |
| “ vessel “         | 1 pallor     | 2 flushing   |
| “ nerve of sense “ | 1 pain       | 2 anæsthesia |

and these opposing conditions all resulting from the same cause—irritation, directly or indirectly applied to the nerve centers—are amenable to the same remedies. The nerves distributed to the body are mere projections of the brain, and as physiologists, we are aware that excitement applied whether central, or peripheral, induces a similar condition throughout the whole tract, as well as in associated centers and their connections, in a minor degree. This explains why a peripheral irritation is frequently the cause of central inflammation, and, consequently, the doubt as to whether a case is one of spurious or true meningitis. If the patient recovers most likely it would be pronounced *spurious*, if he dies there is no doubt but this was a *bona fide* case, and P.M. observation reveals the fact. There is no kind of satisfaction in thus making a diagnosis from the final result. By way of illustration I will give a short case: A child, four years of age, of delicate appearance, had been indisposed and listless for a couple of weeks, frequently coming in from play and complaining of being tired and lying down; she got worse, complained of headache, and vomited several times, had no appetite, bowels rather confined; when I saw her she looked pale in general but occasionally a flush passed over the face. She got some worm powders, and a mild purgative, with no benefit or sign of worms. I gave 10 gr. doses of potass bromide every three hours, and again every two hours for a day or two, with little or no improvement in the symptoms. On the fourth day she was much worse in appearance, was very drowsy and upon waking immediately relapsed into sleep, which was deep, and breathing slow; vomiting ceased and there was frequent flushing of the face, the eyes were half open and divergent squint, pupils dilated moderately, pulse ranged about 120, and temperature 103° during this period, more or less varied by bathing and wet cloths applied to the skin. At this juncture I called in Dr. Rodger, who concluded with me that we had a case of meningitis to deal with, and we gave

an unfavorable prognosis. This child was given quinine, in 5 gr. doses, to lower the temperature; whenever it should rise above the ability of wet cloths to the body to maintain it below  $101^{\circ}$ ; morphia was given in  $\frac{1}{8}$  gr. dose every two hours, whenever there was flushing of the face, cold extremities, or varying or dilated pupils, which symptoms generally occur together. She improved rapidly, and in a week was well enough to go about. Was this meningitis? could any one have denied it on the fourth or fifth day? But I have been told that this was one of the spurious cases, why, *because it recovered*? Now, this is one out of several that I have seen of this kind, and I would like to be informed if there is any other means of distinguishing a true from a spurious case of meningitis beside death, which diagnostic symptom comes too late to be of any avail as a guide for treatment.

Looking at the cause as one of irritation it appears to me that the indications are ~~the same~~ whether we have to deal with *ordinary* actions in the body stimulating an *excited* nerve centre, or whether we are dealing with *extraordinary* actions in the body exciting a *healthy* nerve centre; but as centre and periphery are so nearly related, disease at one end of a nerve induces also a like condition in the other, as, for instance, a thorn in the foot may produce central irritation of the whole nervous system; so also hypercemia of the nerve centre causes spasms and inflammation at the peripheral extremity of the nerve. Accordingly we should infer that medicines which soothe the nervous system would be beneficial in whatever situation the irritation might be, whether it is to soothe an excited nerve centre so that ordinary actions in the body should not irritate it, or whether it is to modify violent peripheral action in order to prevent it from exciting a nervous centre which is not yet in a state of inflammation. Should these premises be satisfactorily established it would place the matter of treatment on a sound footing, whether we were dealing with a case of "spurious" or true meningeal inflammation. We would abjure all irritating medicines such as purgatives, as such are commonly used as derivatives, unless at the outset to make sure that the bowels were unloaded, or for the removal of worms which being greater and continued irritations, are to be removed preparatory to a period of the perfect

rest which it is to be our after endeavor to ensure. I should say that a mild purgative at the outset would be proper, but continued purgation, with a view of derivation from the head, I think is wrong and only tending to produce the condition which we desire to remedy. In a case of cerebro-spinal meningitis, which recovered, a child had no stool for eighteen days, then twelve, then eight days successively, after which the bowels acted regularly. The abdomen was flat and no evil resulted in the delays. Unless some special symptoms arise in the abdomen which might indicate an occasional purgative I am in the habit of paying very little attention to the bowels. Of the actions of medicines which have a soothing influence over the nervous system, I am most acquainted with opiates on this disease. Bromide of Potassium has not appeared to me to possess much power, though I have given it in 10 to 15 gr. doses, repeated every two hours, to children, and I have alternated it on different days with morphia with results always apparently in favor of the latter. Let us now notice the action of morphia on the several symptoms of the disease, especially one, in which this medicine is supposed to be contraindicated. Prominent among these is coma.

In the coma of compression, morphia could be of no benefit, nor could it do much harm, since death is always, I may safely say, the result; but it is otherwise in the coma of irritation, which is frequently mistaken for that produced by effusion. It appears to be of the same nature as that which occurs after a convulsion in which we frequently administer morphia or chloral, in anticipation of succeeding spasms, in order to intercept them. It is distinguished from that of compression by being accompanied by flushings of the face and spasmodic movements of the eyes or limbs, or an unequal distribution of paralysis or spasms; while effusion by compressing the nerve centers causes general depression of the vital actions, indicated by steady but slow movements, and general pallor of the surface and a lax condition of the general muscular system. I will give one or two illustrations of the coma of irritation which was relieved by the use of morphia. A girl seven years of age, who had been ill for eight days with all the symptoms of tubercular meningitis, was in a perfectly comatose condition. The pupils were widely dilated, insensibility of the eyeball, the respiration slow

and snoring, incapable of being roused by a pinch or loud calling, and could swallow very indifferently, so that a teaspoonful of water poured into the mouth caused her to choke before it was swallowed. I gave her  $\frac{1}{2}$  gr. morphia, and in two hours she was capable of giving a sensible answer to questions. This was observed by my friend Dr. Rodger, as well as myself, at different times during her illness. She died in 4 or 5 days subsequently, after she had ceased to take morphia, and was supposed to be improving until symptoms of paralysis of the pneumogastric nerve set in suddenly, indicated by very slow breathing, rattling of mucus in the trachea, very rapid pulse, and final suffocation,—a paralysis due, probably, to irritation, as in the case of the coma, or, as I have seen take place, in limbs, in other cases. A child two months old was found comatose, pale, breathing about 4 or 5 times per minute, with an occasional spasmodic action of the diaphragm. The abdomen was tense and knees slightly drawn up, from which I concluded that it was irritation in the abdomen. I gave small doses of morphia every  $\frac{1}{2}$  hour until the breathing got somewhat better, then left instruction to give two drops of paregoric every hour until relieved. I was surprised next morning to see the child quite recovered. It had two or three slight attacks during the night which was relieved by the paregoric. This case was, of course, only irritation of the brain, producing coma, and was peripheral. I find, in referring to the notes of a case of meningitis, that in two instances, hemiplegia was relieved by morphia, as well as the spasms that preceded it. In this case there was very little serous fluid in the ventricles, but a large quantity of organized lymph at the base of the brain.

I have used morphia in the convulsions in hopeless cases, sometimes rendering the patient conscious for a time, but in one case the convulsions continued after repeated and large doses, though at first it prevented them for a time. I had no P.M.

During the epidemic of cerebro-spinal meningitis, which occurred here about four years ago, I used in all my cases almost morphia alone, with the view of relieving the pain and subduing vascular disturbance and spasms, with, I think, good results, and no evils that I observed. I lost four cases out of ten.

Belladonna appeared to me to increase the

symptoms, and, I thought, caused a convulsion, though given in a very small dose, 2 gtt. of tincture.

Quinine lowered the temperature without creating or increasing head symptoms that I observed.

Purgatives always appeared to me to make the patients worse.

Leeching appeared to have saved one case and bloodletting seems to be a reasonable remedy, since, by relaxing the vascular system, it causes an equal circulation of blood throughout the body, the same as is obtained by morphia.

Hot applications to the head are soothing and relieve the headache. I have applied stupes and, what is better, bathing the head with warm water; patients who were old enough to express themselves said it relieved and soothed them and gave refreshing sleep, and it also diminished the flushings of the face. Cold, especially the ice-cap, as generally used, caused shuddering, and was disagreeable. I think, as a rule, that what is pleasant to the feelings of the patient, both in medicine and surgery, is right, and that the contrary is wrong.

The treatment which I adopt in cases when I suspect meningitis is, 1st. To regulate the temperature, that is, keep the patient cool but equally warm all over. 2nd. Unload the bowels by a mild purgative, remove worms, &c., if any cause of irritation is present. 3rd. Quietude and soothing medicines, the use of which is indicated by flushings and irregular cutaneous circulation, which are the premonitory symptoms of spasms or coma, should the latter symptoms, spasms or coma supervene, I increase the dose. 4th. Frequent bathing the head with warm water.

The points which I wish to bring out for consideration are, 1st. That coma is, in most instances, not due to the pressure of effusion, but to irritation. 2nd. That opiates are not contraindicated in meningitis, even when coma is present, or threatened, if there are irregularities of cutaneous circulation or spasms, and that opium actually, by relieving irritation, dissipates the coma. 3rd. That warm water is more agreeable, more soothing, and more efficacious than ice-caps.

531 Wellington Street, Montreal, July, 1877.



## Progress of Medical Science.

### ON THE MANAGEMENT OF THE BOWELS IN ENTERIC FEVER.

By Dr. Thomas W. Grimshaw, M.A., Physician to Steevens' and to Cork Street (Fever) Hospitals, Dublin.

The question of the management of the bowels in enteric fever has been one upon which different opinions have prevailed among the highest authorities. Thus Dr. Todd says: "Restrain diarrhœa and hemorrhage in typhoid fever, and, when you have fairly locked up the bowels, keep them so. Patients will go for four or six days, or even longer, without suffering inconvenience from this state of constipation." Other writers, Drs. Johnson, Gardiner, and MacLagan, recommend "laxatives."

Dr. Murchison says:—"When there is constipation at the commencement of the attack, it is well to commence the treatment with a small dose of castor-oil, or rhubarb in peppermint water; and when the bowels are confined at a later stage, I am in the habit of prescribing, every second or third day, one or two teaspoonfuls of castor-oil, or a simple enema. But when constipation succeeds to severe diarrhœa, the best practice, I think, is to abstain from interfering for four or five days, and then only to prescribe a simple enema, or one teaspoonful of castor-oil."

The practice of using purgatives in fevers generally is considered by Dr. Hudson, who says:—"Among the worst cases admitted into hospital are those of patients who have been dosed with salts by themselves or their friends."

This sentence was written by Dr. Hudson in 1867, or now nearly ten years ago; it was repeated by him in the new edition of his work in 1868, and yet this dangerous practice of administering violent purgatives to patients at the commencement of fever is pursued not only by the patients and their friends, but even by some practitioners of medicine in Dublin and elsewhere, who ought to know better. I believe the injudicious use of astringents at the commencement of enteric fever is almost, if not quite, as injurious as the administration of purgatives. The administration of a violent purgative to a patient suffering from enteric fever in its early stage has this advantage to the patient over the use of an astringent—viz., that it effectually prevents his going about, and soon drives him to bed or to hospital, where he has at least some prospect of rest and quiet, and generally of more judicious treatment. The astringent treatment, on the other hand, has generally the effect of enabling the patient to go about a little longer, and thus more quickly use up his failing strength, gradually drifting him into a state of established disease, which is certain to be of long duration, terminating in

tardy or imperfect convalescence, and not infrequently in death. The number of cases of enteric fever which have come under my notice, where injury has been done by the injudicious use of astringent or purgative medicine, is almost incredible.

[The following case is given, amongst others, mentioned as examples, by Dr. Grimshaw.]

A lad aged about sixteen, admitted to Steevens' Hospital, stated that "he had had a looseness of bowels; went to a doctor who *stopped* it; he never was bad till his bowels stopped." He then came to Steevens' Hospital, where he was found to have a swollen tympanitic abdomen, tender *all over*, dry brown tongue, the characteristic rash, and all the symptoms of severe enteric fever of about fourteen days' duration; his bowels had now been confined for a week. He was ordered one teaspoonful of castor oil, with six minims of tincture of opium, and if action of the bowels did not take place in a few hours, a simple water enema was to be given. The enema was not required. The oil acted well, effectually relieving the tenderness and distension; the amount of fecal matter passed was so large and so offensive, and followed by such considerable depression, that some doubt was entertained as to the ultimate result to the patient. He made a very slow recovery, the iliac tenderness remaining much longer than usual.

It is by no means easy always to diagnose a case of enteric fever in its earliest stage; but no one should ever venture upon active treatment until the nature of the disease has been made out. The frequency with which a "looseness of the bowels" or a "gastric attack" has been treated simply *as such* by astringents in one case, or "good clearing out" in the other, without any careful attempt having been made either to determine the cause of the looseness, or the nature of the gastric attack, is a disgrace to the profession of medicine. In many instances, this looseness of the bowels, or gastric attack, is the commencement of a serious attack of enteric fever, which, if carefully diagnosed and treated accordingly, might have terminated favorably.

We know that patients walk about at the commencement of and not infrequently during the greater portion of the course of an attack of enteric fever, and some persons have excused an error of diagnosis upon the ground that the patient came to their house to consult them, and had *only* a furred tongue, a quick pulse, and had been in the same state for a week. It may be the result of my peculiar training, but I must say I would assume that a patient with a quick weak pulse, furred tongue, loss of appetite, and who had been in the same state for a week, had enteric fever, unless there was good cause to believe to the contrary. If I find, on enquiry, that he had been chilly, had vomiting, pains,

and either constipation or diarrhœa, and irritation of the urinary organs, I would consider my diagnosis almost certain, even before I had an opportunity of testing the temperature and examining for an eruption, or ascertaining the nature of the discharge from the bowels. Careful observation has convinced me that some practitioners stop short after the discovery of the quick pulse and furred tongue, and only inquire for a headache or for the state of the bowels. If the bowels are confined, the inevitable purgative follows, which is only regulated in intensity by the length of the constipation and the habit of the patient. If the bowels are too free, then as certainly follows the astringent. In a few days more the patient is on the brink of the grave from enteric fever. In other instances the practitioner explains to the patient or his friends that he has "only got gastric fever." Now this is a course which should be scorned by every educated physician. He should, in every case, state, emphatically and distinctly, that the disease is *typhoid fever*, which is the term the public are familiar with as the title of this very severe and treacherous form of disease. I believe it is scarcely excusable for a physician to mistake enteric fever for merely gastro-intestinal catarrh, inasmuch as in a large majority of instances a catarrhal condition of the mucous membrane occurs at the commencement of enteric fever, and should be taken as pointing to an impending attack of that disease.

Now, having pointed out the errors of treatment which so often follow an erroneous or incomplete diagnosis, there still remains in my opinion, another source of danger, and it is this—that the diagnosis having been made correctly, some persons deliberately and advisedly administer powerful purgatives and astringents for the cure of the disease; in the first case with the view of eliminating the specific poison of the disease, and in the second, with the intention of sustaining the patient's strength.

It appears to me to be extremely irrational to expect that in a case where the bowels are already free, possibly too free, that any additional eliminative power will be gained by the administration of a stimulant to an already over-acting organ; and, further, we should not forget that we have an irritated, inflamed, and probably ulcerated intestine which is sadly in want of rest to enable it to return to health. The prescriber of astringents, on the other hand, also forgets the inflamed and ulcerated intestines, and that by the use of astringents he is retaining irritating and decomposing matters in contact with the ulcers, thus increasing their irritation, and promoting the tendency to septic poisoning and deep ulceration, which are the great dangers in enteric fever.

Now, having so severely criticised the practice of others, I may be fairly expected to

mention what practice I pursue myself, and consequently what I recommend. It is difficult to treat of *one* condition of a disease without considering the treatment of other concurrent states.

In the first place, I consider it essential to the fair progress of a case of enteric fever that the bowels should be more frequently moved than in health, and that the motions should be plentiful. I consider that the bowels may be moved with advantage to the patient four times in twenty-four hours, and should never be allowed to remain confined for more than forty-eight hours, and not so long if any symptoms of distension or pain set in.

The measures I take to promote these objects, in many instances are confined to mere regulation of diet—and for many valuable hints upon this point I am indebted to my friend and former colleague, Dr. H. Kennedy, who has published an interesting paper on this subject in the *Practitioner*. Thus, if the bowels are moved more than the required number of times without the diarrhœa being a severe symptom, I find that feeding the patient on boiled milk alone will be sufficient—if not, the addition of saccharated lime water will probably prove effective. If these remedies do not keep the diarrhœa within reasonable bounds—say under six motions in the twenty-four hours—I employ sulphuric acid in the proportion of  $\frac{3}{4}$  3 to an  $\frac{3}{4}$  8 mixture, one ounce to be taken every three hours. This I generally give as an addition to a mixture containing quinine, which I almost invariably employ in large doses in treating enteric fever. Should this fail I add morphia or tincture of opium to the mixture in small quantities. I find that in cases where the boiled milk treatment is employed early, little if any astringent medicines are required. I never employ beef-tea when there is a tendency to excessive freedom of the bowels. In cases of extreme diarrhœa I have employed the lead and opium pills of the Pharmacopœia in 4 gr. doses every fourth hour with great benefit. At the same time I employ linseed poultices over the abdomen, and stupes of turpentine or mustard where pain or tenderness is much complained of. The treatment of constipation is a more easy affair. I may say for this purpose I employ a single drug—namely, castor-oil, and usually muzzle it with opium. I seldom give more than a teaspoonful for a dose, and in many cases but half that amount. In the early stage of the disease, when I find the bowels have been confined for some days before the patient came under treatment, I at once give a dose of castor-oil. This not only benefits the patient, but in a doubtful case assists the diagnosis by often producing a characteristic evacuation. Great caution must always be observed in giving meat in early convalescence, as it is likely to produce diarrhœa. I prefer here to begin with chicken-

broth, then chicken, and lastly mutton. If a rise in temperature occurs after a change of diet, diarrhoea may be expected, and should not be waited for; the meat should be at once discontinued, and the milk resumed. In cases of hemorrhage I have found ergot the most useful remedy, and so far have never lost a case of enteric fever by hemorrhage.

I believe the main point to be attended to in the management of the bowels in enteric fever is to keep them *free*, but *not too free*, and to avoid, as much as possible, purgatives or astringents.—*Dublin Journal of Medical Science*, Feb. 7, 1877, p. 128.

#### ON ALCOHOLISM.

By Dr. SAMUEL WILKS, F.R.S., Physician to Guy's Hospital.

Although alcohol may not be directly a food, yet indirectly it might be so; for, if two men be taken, and one have nothing whatever to eat, and the other have alcohol given him, I presume the latter will remain alive the longer. It must certainly be oxidised; and persons who take a large quantity of spirits grow fat, as we shall presently see.

If, however, we do not understand its physiological workings, yet we can see the effects of it on the system for all practical and clinical purposes. In the first place, does alcohol appear to be a necessary food? There can be but one answer. There are many nations who do not take it, and some whose religion forbids its use. Is it necessary for us? Well, you know many in this country who do not take any. It is not a necessity then; it is for this we have to contend, and, if I can impress this on you, the hour will not be wasted. English people are, however, too often brought up with the idea that it is a necessary article of diet. Patients will take their wines and spirits even when they are doing themselves harm, and, if you object, will ask, "What must they do?" You tell them to do without them; to which they will reply that they must take something. I want you to get it thoroughly out of your minds that there is any *must* in it, and start afresh with the idea of its non-necessity.

Let children always live and grow up without alcohol; in after years, when we pass an artificial life, there may be reasons for taking it; but remember, even then it is not an absolute necessity. Start with this principle; let your patient, even an adult, try to do without it, and then, and if circumstances seem to suggest it, let him have his glass of wine. I do not say that a number of persons can do entirely without any in our present mode of living, but let us regard alcohol in its true light, as a luxury, as we do tea, tobacco, &c. If we do this, we are safe. I cannot recommend you to live entirely by rules and natural laws, and give up

all the conventional luxuries of life, for then we should dismiss more than half the dishes from our table. I do not want this to come about, and, for my own part, I like a glass of wine or a cigar as well as other people. There is in to-day's paper an account of some vegetarians who never eat any meat. I do not advise you to follow their example, but it shows you that meat is not essential to life. We might, I have no doubt, live on what Dr. Johnson states Scotchmen and horses do, viz., oats.

What are the effects of a small dose of alcohol? It is said to be stimulant. If a man be jaded and tired, it gives a sort of temporary support; a little beyond this point and he is depressed, the stimulant effect lasting only for a time. There is a dilatation of the vessels and warmth of the surface taking place; at the expense, however, of internal heat. In large doses the temperature goes down. On this point read two cases mentioned by Mr. Carrington, in that admirable essay of his on Alcohol, in Guy's *Hospital Gazette*.

Do these small amounts really stimulate and help one in his work? I ask the sportsman; he says he gets tired, and then has lunch, after which he feels comfortable and jolly, but never shoots another bird. It is the same with billiard-players. A violin-player in my house was advised to take a glass of wine for his excessive nervousness, but refused, saying "I know I shall lose all my nervousness, but I shall also lose my touch, and my notes will be blurred, and I shall be the last to find it out, although it will be very apparent to others."

You see, therefore, it does not stimulate or add edge to our accomplishments; but we might ask, does it add to our strength, or enable us to endure longer? To answer this I will refer to a little book in my hand, by the late Dr. Parkes, entitled, *On the Issue of a Spirit Ration during the Ashantee Campaign*. This book contains the reports of the medical officers on the effects of spirits doled out to the men. The result is given in the short preface written by Dr. Parkes, to the following effect:

"When, as frequently happens in campaigns, soldiers are marching nearly the whole of the day, and can obtain their regular food only late in the evening, what can be given to lessen the sense of fatigue, and to enable them not only to continue the march, but to be ready for any emergency which may arise? The usual resort is to a spirit ration, and there is no doubt that for a time this exerts a reviving effect. But is it the best thing which can be given, and are its advantages without alloy? I think it can be shown that it is not a perfectly reliable aid, and requires, when used at all, to be so with a full knowledge of its mode of action. The first effect of alcohol when given in a moderate dose (for example, what is equal to one fluid-ounce of absolute alcohol) is reviving; but this effect

is transient. As shewn in the report, the reviving effect goes off after, at the utmost, two-and-a-half miles of additional march, and sometimes much before this; then the previous languor and sense of exhaustion not only return but are sometimes more intense, and if alcohol is again resorted to, its effects now are less satisfactory. Its reviving power is usually not so marked, and its peculiar anæsthetic and narcotizing influence can often be distinctly traced. The men feel heavy, dull, disinclined to march, and are less willing and cheerful. It is clear, then, that alcohol is not a very trustworthy aid; for, supposing a commanding officer having marched twelve or fourteen miles, and desiring to cover ten more miles, finds his men weary, and not being able to halt and feed them, orders an issue of spirits of an amount sufficient to revive, but not to depress; the first effect will be good, but, in less than an hour, his men will be as weary as before, or probably more so. If, then, he re-issues the spirit within so short a period of time, it is certain that, in the case of many men—perhaps the majority, the marching power will be lessened. Even the reviving power of the first issue is not always so considerable as might be supposed; and, indeed, I have been surprised to find how little good effect it has sometimes produced."

The fact is that alcohol, as usually taken, is not a stimulant at all. It is a depressant and narcotic. People are simply under a delusion when they think it otherwise. We ought to change its name, and we should then get a proper notion of its character. I believe this change would tend more than any other single circumstance to make people cautious in its imbibition. It is taken for the same reason as chloral, and as opium in other countries. If you regard it as a narcotic, you will then better understand all the consequences of its use. A man in a drunken brawl over night gets his teeth knocked out. The next morning he has no recollection how it occurred, or in what manner he could have met with the accident. Cases such as this are constantly being brought into the police courts, and to some people seem almost incredible.

Alcohol, you see, is an anæsthetic. The man we have just mentioned has felt no pain. In smaller doses, as you all know, it benumbs not only the sense of touch, but that of sight and taste. Every man who has drunk much wine feels that he has lost his taste for the time. He does not know whether he is taking good or bad. "Every man at the beginning doth set forth good wine; and when men are well drunk, then that which is worse." If it were a stimulant, your taste ought to be more refined. It seems to be an utter absurdity to suppose that human nature can crave after a stimulant. For what are people craving? For what is a hard-worked man longing? not for a stimulant, but

for holiday and repose. It is for repose that every one is seeking. Some miserable people even long for death, "where the weary are at rest." Is not the cry of the lotus-eaters as far reaching as humanity itself: "There is no joy but calm"? It is contrary to human nature to crave for stimulants. The idea is absurd; and the more one knows human nature and its history, the more one wonders how such a name as stimulant could be given to any substance which has had so powerful an influence on the human race as alcohol. It might be known that anything so craved after, must be of a soothing, benumbing, or dulling nature. People say they feel better after taking alcohol. Of course they do; one does feel better.

If any of you, whilst working up for your College or Hall, get down hearted and take a glass of wine or spirits, I have no doubt you feel better; but would you go on with your work? or, would you not go to sleep, or take the newspaper and sit over the fire? If a man have a racking pain in his head, a strong glass of brandy and water will often drive it away: a proof of its narcotising effect on the brain. A man worn out with anxiety and pain, does he want a stimulant to increase these feelings? Is he not making use of a misnomer when he takes a stimulant to drown his sorrows in the bowl? Do not the lower orders, as in an Irish wake, know the benumbing influence on grief? Is it likely they would have recourse to a drink to increase their susceptibilities? If it were a stimulant, it would bring out our faculties; but, instead of this, it paralyzes our intellect and then allows all the bad passions to have free play. This is the meaning in *vino veritas*, just as a madman loses his will and control by his higher faculties becoming paralyzed.

An immense evil has been perpetuated by giving alcohol a wrong name. It is called a restorative and stimulant; but this is only to a very slight extent and under special circumstances. Its general effect, and that for which it is almost universally used, is for its benumbing action. I want you to think of it as a depressant, an anæsthetic and narcotic, rather than as a stimulant, and you will then get an insight into its injurious effects on the human body.

As a medicine, of course, it is a good one. It is excellent as a sedative. After trying opium and chloral without success, alcohol will often give a good result in the severest neuralgia. It lowers the temperature in febrile conditions, sometimes two or three degrees. This is especially the case in typhoid fever and pneumonia. A quick pulse and high temperature call for it. There was an old man in this state last year in the ward; and I believe his life was saved by the large quantities of brandy that he took. It seems to prevent tissue-change; and large quantities seem to make a person fat. There was one case of it in this hospital some time ago, of

a woman who had suddenly taken to drink spirits and became inordinately fat. It is curious that, with all my reluctance to order alcohol unless I clearly see its necessity, I never find any one but myself order spirits of wine as a food in order to promote the growth of fat; but its effects in this respect are very striking. Little children wasting away, such as those who are not suckled, have cod-liver oil and steel wine given them, and yet still waste; but, if put on alcohol, will often get rapidly fat and well. I have now seen several such cases.

What are the effects of alcohol, if taken in excess?

Now, I am not going into the subject of drunkenness; but may mention that some of the effects are possibly due to the impurities put into the spirit. The adulterations of beer, I have no doubt, give rise to other symptoms than those arising from taking the genuine liquor. It is a horrible thing to contemplate that rich people, holding high positions in parliament and society, should be gaining large incomes out of houses where poison is sold. An officer of a regiment met me one day, almost in tears, because one of his men, under the influence of drink, had committed a murder; and, "I believe," he said, "the beer was drugged, and no one is to be punished but the man who drank it." In Paris there is a terrible liquor called absinthe, and patients are often being brought into the hospitals mad through intoxication from it.

Then, besides ordinary drunkenness, we have dipsomania; a disease for which many want to legislate. The subjects of this are not, for a time, responsible persons. They feel a craving coming on, and sometimes have strength of mind enough to go at once to a medical man and ask to take them into his house, or shut them up in a lunatic asylum to restrain them from committing themselves. I once had a clergyman in a country district affected with this under my care; and he had nearly ruined himself. When the fit came on, he used to go to the village ale-house, and take glass after glass until he was drunk. Now, knowing when the fit is approaching, he rushes away from his home and takes the train for London. There is no use in talking to that man; he is as well informed as you: he merely asks for assistance. There is a little book published on this point, styled, "*Who is to Blame?*" It is well worth your while to read it. It is an account of a man who gets drunk, shuts himself up in an asylum, but, as there is no power to retain him, he rushes out when the fit comes on him, goes to the public-house, then home, and kills his wife.

Then, there is chronic alcoholism, bringing about dyspeptic and other symptoms only too well known. I have no hesitation in saying, although I am speaking against the evil effects of alcohol, that a considerable part of my income

is derived from the drinking propensities of my patients. Every day some young man comes to me, with mottled face, yellow eye, and red tongue, saying the first thing in the morning he is sick, and the vomit sometimes streaked with blood; his bowels are loose, and he does not eat his breakfast. I have then heard quite enough to enquire how much whiskey or sherry he takes at 11 a.m. You may have observed that whiskey has taken the place of brandy in the medical dietary. I have failed to discover the reason, so I suppose it is a secret of the distiller's. He, of course, remembers well the ominous hour of eleven; and you then have only one duty to fulfil—*i. e.*, to tell him he is killing himself; and, if that be his object, he had better continue in his course. If not, he must desist; and you will assist him in his endeavor.

If the practice continue, the liver undergoes cirrhosis, and the kidneys become granular; and in some cases there is a special tendency for the cerebro-spinal system to be affected. Thus, in delirium tremens, long before the attack, a man is foolish and half-witted, what is called a good-natured fool. The brain wastes, and weighs several ounces less than it should. This was figuratively expressed by Shakespeare when he said—"Oh, that a man should put an enemy in his head to steal away his brains." The spinal cord also is attacked, and a paraplegia may result, so that the popular saying is quite true, that some persons get drunk in the head and others in the legs. The effect on the head is very well known; that on the spinal chord does not appear to be so readily recognised.

Alcoholic paraplegia is generally found in women of about the middle age of life. It is ushered in by pains in the limbs, then sensation may be partially lost, at the same time some want of power to move them. So you see the chronic action of alcohol resembles much its acute temporary effect where the man getting drunk is narcotised, foolish and loses sensation, so that one can do anything with him, his hand trembles, he cannot find his house in the street, fumbles in his pocket for his key, and his vision is so indistinct that he declares some one has run away with the key-hole.

Alcohol produces a chronic inflammation of the brain and cord with their membranes. These latter are thickened, and the nerve-centres waste and often become what is called sclerosed. It is very difficult to say when a functional malady has become an organic disease, so that in these cases, however bad they may appear, there is a possibility of ultimate recovery.—*British Medical Journal*, Dec. 30, 1876, p. 845.

#### A COLD AND ITS CURE.

By Dr. Jukes Styrap, Physician Extraordinary to the Salop Infirmary.

It has been well remarked by Dr. George Johnson, that "a cold," or ordinary catarrh,



although of itself not a dangerous or serious malady, is nevertheless, with many persons, an oft-recurring one, causing much annoyance and discomfort both to the sufferer and to his associates—of which fact, all of us are doubtless more or less disagreeably cognizant from personal experience; and, as *medical* treatment, notwithstanding popular prejudice to the contrary, has very considerable influence on the progress of the disorder, it is, I think, well worth our while to give the question thoughtful consideration.

The exciting cause and symptoms of catarrh, together with its popular domestic treatment, are too well known to need recapitulation. I purpose, therefore, to limit my remarks to the medical treatment which, for a period of twenty years, I have adopted with considerable success. At the same time, I think it well to note that the treatment refers to that particular form of "cold" characterised by excessive defluxion from the nares and lacrymation, and more or less febrile disturbance (and not to that which, in ordinary language, is styled "a dry and stuffy cold"), and is based on the principle of restoring the natural functions of the skin, which a chilling wind or other atmospheric influence on persons with lowered vitality has wholly or partially suppressed. There are two simple modes of accomplishing the wished-for effect: firstly, by the direct application of heat to the surface of the body by immersion in a warm bath of 100 deg., increased to 110 deg. of Fahrenheit—but in a far more efficient degree by the use of a hot-air bath; and, secondly, by the action of certain diaphoretic medicines in combination—which latter are generally sufficient (and certainly the least inconvenient) to effect a cure of ordinary catarrh. In my own person, indeed, I have never found it necessary to have recourse to a bath; still, in severe colds, it may be judicious to combine the two—the bath and the medicine.

My medicine is a very simple one, and the treatment based on the principle recommended by Dr. George Johnson in his recent Lecture on the treatment of Catarrh and Bronchitis, and which I have carried out for upwards of twenty years with much success.

The difference in our respective treatment by opium, however, would seem to be, that he prescribes it in a "full dose" at bedtime (hence the nausea, headache, &c., to which he refers), with or without ipecacuanha; whereas I invariably give *small doses of morphia and antimony* every three or four hours until the sneezing and defluxion cease, which, with ordinary precaution, results after the third or fourth dose. The antimony has, in my opinion, a more special effect on the mucous membrane of the breath-passages than ipecacuanha.

The following are the forms which, slightly varied, I have used for many years: a dose or

two of either of which has enabled me on various occasions, when suffering from catarrh, to attend to my professional duties with comparative impunity. Confinement, however, to the house for a day or two, should, I need scarcely remark, be insisted on, whenever practicable. The warm or hot air-bath (or "packing"), as suggested by Dr. G. Johnson, is a valuable adjunct to the treatment, if had recourse to on the day of seizure; and, in severe cases, I generally recommend one or the other, if attainable, and an immediate retirement to bed in a warm room.

R. Liq. morphiæ (P. B.) ℥xl : vini antimon. ℥xxx; potassæ citratis ℥iv; syr. aurantii ℥ij; aquæ ad ℥iv. Misce et fiat mistura, cujus sumat cochlearia magna ij quâqua tertiâ vel quartâ horâ.

R. Liq. morphiæ ℥xl; vin. antimon. ℥xxx: liq. ammon. citrat. ℥j; potassæ citratis ℥iv; sp. chloroformi ℥j; aquæ ad ℥iv. M. Ft. mist., cujus capiat cochlearia magna ii quâqua tertiâ vel quartâ horâ.

My attention was originally directed to the value of small doses of morphia in catarrh under the following circumstances: Many years ago, I was confined to my room by a very severe catarrhal attack and bronchitis, for which antimony, &c., were prescribed by a friend with but trifling relief. For some reason or other, I was induced to add the twelfth part of a grain of morphia to a dose I was about to take, and in half an hour or so the sneezing and defluxion considerably abated. The next few doses were taken without the morphia; and the coryza, &c., returned, and the cough became troublesome; in consequence of which I repeated the morphia, and again the sneezing, &c., ceased. In every subsequent attack of catarrh (to which I was at one period very subject), I combined the antimony with morphia; and, having tested their value on myself, prescribed them for others with a like satisfactory result. In what way the morphia effects the speedy relief from discomfort, which almost invariably follows its administration, I am not prepared to say. Probably, as Dr. G. Johnson suggests, it is due to some direct influence on the nerves and vessels of the inflamed mucous membrane, rather than to any diaphoretic action. Be that as it may, I would strongly advise such of you as are subject to "colds" just to try the medicine; and I entertain little doubt that the effect of its first trial will be such as to induce you eventually to thank me for the suggestion of so simple a remedy.

The antimony, in addition to its special effect on the inflamed mucous membrane, tends to counteract the usual constipating action of the morphia; and the citrate or bicarbonate of potass relieves the thirst and itching not infrequently produced (in my own case at least) by the opiate.

I would also remark that, by giving the morphia in small and repeated doses of one-twelfth of a grain, combined with correspondingly small doses of antimony, it can be safely administered to persons otherwise intolerant of opiates, without suffering from the headache, nausea, and other distressing symptoms which so often follow a full dose of opium. Mayhap some will mentally exclaim, "Oh! the principle of treatment has been known from time immemorial." Possibly so. Nevertheless, simple and efficacious as the treatment by morphia and antimony in small doses really is, I can truly assert, that during the not few years in which I have been in the profession, I have never seen it alluded to in any work on medicine, or practised by others than myself; which fact will, I trust, be deemed a sufficient apology for soliciting your attention to it.

In regard to the hot-air bath, I need scarcely remind you that such may be readily extemporised—the chief essential being a capacious spirit-lamp, with a large wick, usually kept in stock for the purpose by surgical instrument makers; and, being made of tin, the cost is trifling. The following will be found a simple and effective plan: Let the patient be seated, undressed, in a suitable armchair in his bedroom, and carefully enwrapped in two or three folds of blankets extending from above the shoulders to the floor, but *outside* the chair (or, still better, a hoop affixed thereto), so as to allow a free circulation of the hot air round the body. A Mackintosh cape thrown over the blankets will enhance the effect. The best position for the lamp, according to Dr. G. Johnson, is, with due precautions, between the legs, rather than underneath the chair; and it should be kept burning for twenty or thirty minutes, or until free perspiration be established. The patient should get into a warm bed between the blankets. Nervous people are apt to object to a hot-air bath so constructed, from an absurd fear of the flame of the lamp. The difficulty may be obviated by placing a wire guard over it.

In the absence of the means for providing a hot-air or water bath, an effective action of the skin may be induced by wrapping the patient in a sheet or thin blanket (to which latter patients offer less objection than to a wet sheet, on account of the relative warmth-imparting feel) wrung out of moderately hot water, and enveloping him in a couple of warm dry blankets; in other words, "packing" him, as it is termed, for an hour or more, until free perspiration takes place; a plan of treatment which, I venture to affirm, you will find highly beneficial in renal and other forms of disease.—*British Medical Journal*, Dec. 9, 1876, p. 747.

#### ESOPHAGUS IN CHILDREN.

IN allusion to a case in which there had been some difficulty in extracting a coin swallowed by a

child, Dr. Thouvenin, in the *Bull. de Therapeutique*, states that in such cases he adopts a very simple measure with great success. It consists in laying the child flat on his belly on a table, with his head, supported by an assistant, projecting beyond it. The finger is then introduced into the mouth in order to depress the tongue, and the coin slides out along the finger of the operator.—*Med. and Surg. Reporter*, Philadelphia.

#### A SPECIFIC FOR PTYALISM.

By Dr. Jukes Styrap, Physician Extraordinary to the Salop Infirmary.

In a very annoying case some twenty-six years ago, after vainly trying all the well-known remedies, I decided on giving sulphur, it having, occurred to my mind that "Plummer's pill" (then so-called, and oft prescribed), containing one grain in five of calomel, was seldom known to produce salivation; which fact I also remembered to have heard an old medical teacher attribute to the sulphur in the sulphurated antimony then known as the oxy-sulphuret. Success, however, did not crown my efforts until, by careful observation, I learnt the proper mode of administering it, which is in *small and repeated doses, special care being taken to diminish the quantity if relaxation of the bowels supervene*; for its peculiar action in controlling ptyalism depends upon its being retained in the system, and not allowed to pass off by the bowels—which, if necessary, should be prevented by the addition of a few minims of liquor morphiae or tinctura opii. The bowels should not be moved more than once or twice, in twenty-four hours. If persevered in regularly every three or four hours, the secretion of saliva and soreness of the gums become very sensibly diminished in the course of thirty-six hours or less; and I have invariably found that its antidotal action is ushered in (or "out," correctly speaking) by the exit of a most offensive gas *per anum*—a fact which you may readily ascertain by inquiring whether, when the bowels have been moved, the evacuations are particularly offensive. The reply I have commonly received has been "Very."

I do not attempt to explain its *modus operandi*—whether by chemical combination or otherwise. All I can say is that, in the several instances in which I have prescribed it (once in the case of an old military officer aged seventy, and formerly an M.D. of Cambridge, who, relying on his whilom medical education, prescribed for and salivated himself), the controlling action was indisputable.

I have generally found that patients suffering from salivation are loth to admit, even when very evident to the medical attendant, that the flow of saliva or soreness of the gums has abated; indeed, they never appear to recognise the relative degrees of soreness, &c., until their

attention is pointedly called to the fact that they speak with greater facility; and then, on inquiry, I have usually found that a successful attempt has been made to swallow a little "soaked" bread, and that fewer handkerchiefs are required for the reception of the saliva. In soliciting your attention to the form in which I have been accustomed to prescribe it—

R. Sulphur. præcip. ℥ij ad ℥iv.; potassæ chlorat. ℥ij. ad ℥j.; liq. morphinæ ℥j ad ℥iss; mist. amygdalæ ℥viiij. Misce bene et fiat mist., cujus sumantur cochlearia magna ij quâqua tertiâ vel quartâ horâ, phialâ agitâtâ,—

I venture to express my belief that the antidotal action of the sulphur is entirely independent of, though possibly assisted by, the other remedies. With regard to the potass, I at first prescribed the nitrate, subsequently the bicarbonate, and lastly the chlorate, which, being a neutral salt, does not produce the painful smarting of the gums which the two former preparation do. The mistura amygdalæ, in addition to somewhat disguising the nature of the remedy, offers a bland vehicle for its administration.—*British Medical Journal*, Dec. 2, 1876, p 711.

#### ON SMALL-POX.

By Dr. Robert Bell, Physician to the Glasgow Ophthalmic Institution.

It is only natural to conclude that the great exhaustion which ensues in small-pox is due to the highly nervous and important as well as extensive organ, as the skin most certainly is, is in a state not only of great and intense irritation, but of almost complete inactivity as well. Now, the great danger of a fatal issue is generally contemporaneous with the development of the suppurative or secondary fever; and, as my method of treating the disease does away with any secondary fever, the greatest, or at least one of the greatest, sources of danger is removed. By commencing this treatment at the very beginning of the attack, the comfort of the patient is secured at once; the skin is rendered less irritable; the fever, in consequence, is kept down; the strength of the patient remains unimpaired; he is able to sleep and take nourishment, and, in short, to pass through the whole course of the attack with the minimum of discomfort. At the period when suppuration commences in the vesicles, and when otherwise a new phase of the disease would present itself, no such unhappiness is encountered, and the patient sails pleasantly through a sea of troubles, quite unconscious that he is doing so. This excellent result is due, doubtless, to the sedative effects of the remedy employed.

The plan of treatment consists in painting every part of the skin where the eruption

appears with one part of carbolic acid dissolved in from eleven to fifteen parts of glycerine, and repeating the application night and morning. The urine must be watched with great care as it often happens that the carbolic acid becomes absorbed and makes its presence known in the urine by giving the fluid a dark smoky appearance. If this be observed, the application must be made less frequently, or a weaker solution of the acid employed, as it may act too severely as a depressing agent, though I never knew this actually to result from the use of even the more concentrated solution. The employment of carbolic acid in this way has other advantages besides those already mentioned. It acts as a disinfectant, and it prevents pitting to a very great extent. The latter effect is due to the fact that suppuration does not run the same lengthened course as it does when no carbolic acid is employed, and thus the skin is not destroyed to such a depth as it would otherwise be. I could enumerate many of the patients who have suffered from what might have been called very severe attacks of small-pox, and yet now they present not the slightest trace of having had the disease.

The following cases will give some idea of the results obtained while pursuing this plan of treating the malady.

*Case 1.*—Mrs. T., aged 60, a thin and delicate lady, took small-pox on November 21st, 1871, which was not only confluent, but in some parts of the body hemorrhagic. I never expected that my patient would recover, as, previously to this illness, she had been in a most critical state of health. Every portion of the body where the eruption made its appearance was painted over with a solution of one part of carbolic acid in twelve of glycerine. Immediately the great distress produced by the eruption was relieved, and was prevented from returning by the application being repeated night and morning. The rest of the treatment consisted in supplying plenty of fresh air and a simple yet nourishing diet. Chlorate of potash in solution was given as a drink, and the bowels were kept moving by a mild laxative given when required; and the patient passed through the whole course of the disease without an unfavorable symptom. There was no itching of the skin, and there was no secondary fever; indeed, there was no fever at all after the first application of the carbolic acid and glycerine. The patient slept well and took her food with a relish. Within a year after her recovery, it was almost impossible to find any traces of the disease, so completely had the tendency to pitting been overcome.

*Case 2.*—Mrs. Y., aged 32, a strong and stoutly made lady, was confined of a healthy boy on December 7th, 1871, and on the day following was attacked by confluent small-pox. Under the circumstances, the greatest danger was, of course, to be apprehended, and I was, therefore,

exceedingly anxious. The same treatment as in Case 1 was employed, and with the like satisfactory results, with the one exception that, at this date, very slight pitting can be perceived, if looked for. The baby was vaccinated before it was twenty-four hours old, and it did not take small-pox.

One more case will suffice to shew that this treatment is deserving of a more extensive trial. On December 20th, 1872, I was asked to take charge of two ladies, mother and daughter, suffering from small-pox, their own medical man declining to attend. I found the mother prostrated by an attack of confluent small-pox, and her daughter suffering from the same disease, but of the discrete variety. The features in the elder patient were quite obliterated. The same treatment was adopted in both cases, with the effect of giving almost instant relief. As the disease held on in its course, the last named patient showed slight symptoms of prostration; and, although I was not apprehensive myself, I thought it better to have a consultation with the gentleman who then had charge of the Fever Hospital in this city. He took a very unfavorable view of the patient's condition, and gave it as his opinion that the case would probably terminate fatally when the secondary fever set in; but, as this symptom never shewed itself, the danger was avoided, and my patient made a rapid recovery. It is now impossible to detect any disfigurement from pitting.—*British Medical Journal*, Nov. 25, 1876, p. 677.

#### ON THE TREATMENT OF CHOREA.

By Dr. J. Magee Finny, Physician to the City of Dublin Hospital.

My object is to bring under notice the advantages of a certain line of treatment, without in the least claiming that it is either new and untried, or that it is the best and only treatment to be adopted in chorea.

It is a line of treatment, however, which as far as I can judge from observation of the treatment of chorea by other practitioners and the perusal of the cases recorded in our journals, is one that has of late, rather fallen into disuse and discredit.

*Case 1.*—*Severe Chorea; no history of rheumatism; no cardiac complication: Treatment by Sulphate of Strychnia and Ether-spray, commenced a fortnight from the beginning of illness; Immediate benefit; Recovery in fifteen days. Total duration, four weeks and one day.*—Richard F., aged thirteen, came under my care in the City of Dublin Hospital, 15th May, 1875, a fortnight ill. No cause for the attack could be obtained, except that he was a very studious boy, extremely fond of reading, and used to devote most of his out-of-school hours to study. He was a fair-haired, well-nourished lad, and presented none of the

anæmic symptoms so common in choreic patients. Before he came into hospital he had bitten his tongue on several occasions, but, although the movements of his body and extremities became much more excited for some days after admission, the tongue escaped further injury.

This lad was a well-marked example of severe chronic disturbance—for, in addition to the ordinary "madness of the muscles" of the eyelids, lips, fore-arms, hands, and legs, he was totally unable to stand or take a single step. His whole body, as he lay in bed, was so jerked and thrown about, that it was found necessary to prevent his falling out by tying a folded sheet across the bed; while any attempt to lift him up in the bed threatened dislocation of the head, so violent and jerking were his nods. His speech was also greatly impaired by the want of co-ordination of the expiratory muscles and those of the tongue and lips, a sucking inspiration continually interrupting even the shortest sentences. The treatment he had received before I saw him had consisted of succus conii and shower baths, with beef-tea and milk dietary.

On 15th May I commenced the administration of strychnia in doses of  $\frac{1}{16}$ th grain of the sulphate three times a day.

On 17th the dose was increased to  $\frac{1}{8}$ th grain, and each day it was increased little by little.

The prescription I adopted is one recommended by Hammond, which, by its accuracy and the facility of regulating the dose, supercedes that of Trousseau.

A solution of that of sulph. strychnia, of half the strength of that of the British Pharmacopœia, is made, so that five minims shall represent  $\frac{1}{16}$ th grain of the alkaloid. Sufficient is ordered for one day, and syrup added. Each day an additional minim of this solution is added to the dose of the day before, so as gradually to reach the dose which will produce the physiological effects of this powerful excitant, or which will suffice to check the excited movements of the muscles. In the case before us I employed in addition to the strychnia, what seems to me to be a useful adjunct—namely, the application of the ether-spray to the spine, from the nape to the sacrum—a line of treatment introduced by Zimberlin and Lubilski, which is said of itself to be curative.

On the 17th I first applied it to this boy's back for four minutes. The operation was not very easily carried out, owing to his excited state—increased, doubtless, by the alarm at the novel remedy, so that it became necessary to have him held during its application. Immediately the spray was stopped and his fear passed away; the patient said he felt better, and he could speak with more ease.

It is commonly the case that the first application is dreaded most, and gives rise to most alarm, but afterwards this fear gives way to one

of actual pleasure; so it was in this boy, for on the second occasion (21st May) he did not seem to mind it, and on the third and last (the 26th) he said he liked it, and, to all appearances, he enjoyed its application. After each spraying he always expressed himself more clearly and intelligibly, and said he felt steadier and better.

On the 19th and 20th May—that is, in four or five days from the beginning of the treatment when the dose of the strychnia had reached only  $\frac{1}{80}$  gr. *ter die*,—there was marked evidence of improvement. The patient had much more command over the muscles of his hand, so that by an effort (of certainly no long duration) he could keep it steady and open and shut each finger in succession. He no longer needed the restraint of the folded sheet across him; he could also stand and walk very fairly with help; but the nodding of his head still persisted, and seemed beyond his control, so that it gave him a curious appearance as he walked. The next day he was able to feed himself; he was allowed up on the 22nd—the seventh day of treatment; and on the 26th he was able to walk out in the grounds of the hospital unsupported, his head being now quite steady. He was also able to hold a book and read it, and, in fact, he spent most of the remaining few days of his stay in hospital in this occupation. He left hospital, seemingly quite well, on the 29th, having been under strychnia treatment fourteen days. The highest dose of strychnia reached in this case was  $\frac{1}{17}$ th grain on the 27th. It, however, produced none of its physiological effects, such as pains and stiffness in the neck, arching of the back, or cramps or pains in the legs. The only marked effect seemed to be the production of an enormous appetite for bread, of which the patient devoured, in addition to his allowance, an extra medium-sized loaf *per diem*.

Ten days after leaving hospital he came back with a slight return of the unsteady movements, but these passed away in a few days, and they were very probably induced by his eager haste for study, as I learned he had, immediately on leaving hospital, resumed his studies at a school in Marlborough-street.

The total duration of chorea in this case—excluding the relapse of a few days—was four weeks and a day. Improvement followed four days treatment, and cure was effected in fifteen days.

I am indebted for the notes of the foregoing case to Mr. W. Fraser, my clinical clerk.

*Case 2.—Severe Chorea; primary attack, bilateral; no Rheumatism or Cardiac Disease; treatment by Strychnia and Ether-spray; Improvement in Four days; Cure in Twenty-five days of Treatment. Total duration, six weeks and three days.*—Catherine T., aged eleven, was admitted into the City of Dublin Hospital on the 5th January, 1875. A week before admission I saw her in the extern department of the hospital,

having walked thither. Her symptoms then consisted of grimaces, awkward jerky mode of walking, and dragging, unsteady motion of the left foot; but between that day and the 5th, the chronic movements became much worse, and were so aggravated that she was unable to stand or walk, and had to be brought in a cab to the hospital and carried up stairs. She is the daughter of a man who had a year ago left the army, and seemed to lead a vagabond life. Her mother died two years before, and she has since been living a sort of gipsy life with her father, and by her general appearance, as well as by the presence of two spots of *tinea circinata*, it is evident the child was much neglected. Eight months before, while in Manchester, she had been ill of fever, but of what sort could not be ascertained. She had suffered from no fright, nor any special cruel treatment, nor had she been with any case of chorea. She is a very bright, intelligent-looking child, with dark hair and eyes.

Her father stated that, about a week before I first saw her, he had noticed a “drag” in her left leg in walking, and that her left arm afterwards became unsteady; he complained also that “she kicked so he could not sleep in the same bed with her.”

The symptoms of the disease in all its fantastic shapes were well exemplified in this child, though they did not include biting of the tongue. The upper extremities were more affected than the lower, the left side being the worst, and the most remarkable feature was the rapidity with which complete supination, pronation, and rotation of the arm were performed.

Most careful examinations, frequently made during her stay in hospital, failed to discover any bruit or other evidences of any functional or organic disease of the heart; and although the pulse at times was quick, it seemed attributable to the general muscular excitement. Anæmic symptoms were not prominent.

Treatment consisted of plain nutritious food and the gradual and persistent use of strychnia sulphas.

On the 9th January,  $\mathfrak{M}$ . 4 of the solution of sulph. strychnia (referred to in last case), equivalent to about  $\frac{1}{80}$ th grain, were administered in syrup three times a day.

On the 11th it was increased to  $\frac{1}{45}$ th grain.

On the 12th to  $\frac{1}{30}$ th grain; and so on each day to the 18th, when 14  $\mathfrak{M}$ . of the solution, or  $\frac{1}{7}$ th grain, were employed.

Improvement did not show itself the first two days of the treatment, rather she seemed worse. However, on the fourth day, while taking  $\frac{1}{30}$ th grain, she began to shew signs of amendment, and each day she got better and better. This continued to the 19th, when, as I have said,  $\frac{1}{17}$ th grain was reached. On that it was found necessary to stop the treatment, as the child complained of pain in her neck, with stiffness in



neck, back and legs; and when placed on her feet she was unable to stand, being inclined to arch backwards, the toes of both feet were drawn forcibly in under the soles, and she cried out from the pain. All medicine was omitted, and towards evening these symptoms, indicating a full physiological dose of strychnia, had entirely disappeared—and, what was of equal importance, with them to a great extent the irregular movements. Next day it was most evident to everyone that she was much quieter than ever before; and, except when spoken to, or on attempting to sit up, the choreic movements had well-nigh ceased. I thought it well, however, not to stop the medicine altogether, so the patient recommenced the next day the sulph. strychniæ in doses of  $\frac{1}{4}$ th grain.

On this day I applied the ether-spray for two minutes, a longer application serving but to alarm the patient. I employed it again on the 22nd and 27th, and it was followed by quietude in each instance. From the 20th January to 1st February the dose of strychnia was gradually again increased, and  $\frac{1}{3}$ th grain, *ter in die*, was reached before its physiological effects again showed themselves to a slight degree. The dose was again reduced to  $\frac{1}{20}$ th and continued at that dose for four days longer, when pills of ferrum redact. were substituted. The improvement which first showed itself in so marked a manner on 20th January, never went back, but rather steadily increased and continued without interruption till February 3rd, when *all* the symptoms, which on admission on January 5th she had exhibited, were completely gone. She was able to command the muscles of the face; could keep the arms and forearms steady; could extend and flex at pleasure her fingers; could walk with ease along a chalked line, and go up and down stairs. She left hospital perfectly well, fat and strong, a few days afterwards.

She was thus under strychnia treatment for twenty-five days, while improvement showed itself in four days; and the whole duration of the attack was but six weeks and three days.

*Case 3.—Primary Severe Chorea, bilateral; no Rheumatism or Cardiac complication; Treatment, Ether-spray and Nerve-sedatives; Improvement.*—Joseph G., aged nine years, was admitted into hospital in March, 1876, suffering from Chorea of about fourteen days' duration. It appeared that about this time his mother noticed strange twitchings of his head. The irregular movements were next observed in the right arm and afterwards in the right leg. The left side was then affected, but the movements were never so severe in the left as in the right side. There was no history of rheumatism. On admission there was well-marked chorea of the face, eyelids, lips, and tongue; the whole body and extremities, particularly those of the right side, were in constant agitation, so that various parts of his body were erythematous and abraded;

the child could not stand, but he was able to walk in a wild, spraddling, plunging manner. The uneducated looker-on, in addition to being struck by its ludicrous appearance, must have expected such muscular exertion to be attended with perspiration and subsequent fatigue. Though well known, it is, nevertheless, a very curious fact, that sufferers such as this case and the others I have described, although they writhe, wriggle, toss and twist from morning to night, do not betray fatigue, nor are the most violent movements attended with perspiration. The patient could speak tolerably distinctly, though the words of the sentences he employed were run into each other with wonderful velocity, and many an ill-timed in-sucking of the breath made them halt and stagger in a curious way. There was no evidence of any organic disease of the heart or blood-vessels.

The only cause which could be learned as at all likely to produce chorea, in the absence of his having received any great fright, or of his having witnessed chorea in other children, was the existence of intestinal worms (*ascarides lumbricoides*), twelve of which had been expelled by santonin, by my colleague Mr. Croly, who had seen the child before admitting him to hospital.

These entozoa have, by many, been considered a sufficient exciting cause of chorea, but why worms should in one child induce such an affection, and in another produce no nervous symptoms—and why, in this child, they did not induce this peculiar train of irregular movements sooner—I do not feel myself confident to explain, and I do not care to theorise about it.

While in hospital two more female worms were got rid of by santonin, followed by castor oil.

In this case I was anxious to see which of the two remedies I employed in my former cases—the strychnia or the ether-spray—was the more to be relied on, and, accordingly, I gave no strychnia for the first ten days he was in hospital, and only employed the spray to the spine, from the nape to the coccyx. At first the application was for five, and then for ten minutes. It was used every second day. In addition to the ether-spray, which seemed to be always followed by much comparative quietude, it was found necessary to give him sleeping draughts, as for some time before admission to hospital he had not slept, but tossed about all night. The following draught was ordered and repeated nearly every night:—

R. Potass. bromid., gr. 10; tinct. hyoscyami,  $\mathfrak{m}$  20; hydrat. chloral, gr. 10; syrapi simpl., 3i; aquæ, 3i. M.

At the end of the ten days the report was that the excited irregular movements are much lessened, and that he can perform, with some

degree of ease, some small action, such as picking up a coin, shutting and opening his hand, but he cannot walk steadily, nor extend and flex each finger at will. He was improved a little. I could therefore say that, in this case the ether-spray, while it lessened the severity of the movements for a while, did not act curatively. The treatment was now changed, and strychnia commenced, but I lost sight of the patient soon afterwards, as his mother, seeing him somewhat better, took him home. The contrast of this case and the others is somewhat remarkable, and points to the advantages of the early use of strychnia.

The method of administering this powerful nerve-tonic, which I employed in all my cases, was that recommended by Hammond, and I was guided in the dose more by its influence on the movements of the patient than by the desire to produce its physiological results, as Trouseau would teach.

Besides chorea, I have employed strychnine in other cases in the manner I have described with excellent results—and in one case in particular, the choreiform movements of cerebro-spinal insular sclerosis were kept better under control by its employment than by other nerve-tonics, or nerve-sedatives.

Administered in this way, it is, I am convinced, a safe as well as a most useful remedy. It is not difficult to get children to take it, as its bitterness can always be masked by the various syrups of the Pharmacopœia, and it has the two-fold effect of improving digestion and increasing appetite, as well as of keeping the bowels regular—matters of no small moment in the treatment of choreic patients.

Hammond states that he "had never seen the slightest ill consequences follow this mode of treatment," and "he had carried it out in thirty-two cases occurring in children under the age of fifteen, and in three persons of adult years, without a single failure." Such evidence is worthy of all attention, and should be a sufficient answer to those who object to strychnia being used in doses large enough to produce its physiological effects, but I have a higher authority than Hammond on the safety of this medication and its therapeutic powers; for as you all doubtless recollect, in his last lecture delivered in this hall (Nov. 27th, 1876)—one in which he dwelt on the treatment of brain disease—Dr. Brown-Séquard gave it as his opinion—an opinion which must carry with it all the weight and force of such an authority—that in many cerebral diseases strychnine is the chief remedy to rely upon, and that to obtain its good results, it should be employed, and employed fearlessly, to produce its physiological effects—nay, further, that these effects ought to be kept up, so that the slight tetanic rigidity of the muscles should be maintained for four, five, or six weeks.—*Dublin Jour. Med. Science*, Jan. 7, 1877, p. 31.

## ON THE TREATMENT OF PLEURITIC EFFUSION.

By Dr. F. De Havilland Hall, Casualty Physician, St. Bartholomew's Hospital.

As I do not intend to allude to the treatment of acute pleurisy in this paper, I will pass at once to the method I employ in pleuritic effusion.

In an ordinary case of pleurisy with effusion, when there exist none of the indications for thoracentesis to be hereafter mentioned, I always begin with the following treatment, if the symptoms be at all acute, and the temperature above 99° F. I order the patient to bed, and even in cases of latent pleurisy where there is little or no febrile reaction, quiet should be enjoined as the process of absorption goes on so much more readily when the patient is at rest. After attending to the bowels, and securing a daily evacuation by means of a purgative if necessary—and if one be required, calomel or blue pill in combination with the extract of colocynth is the best—I then proceed to the more specific treatment, which consists in keeping the affected side thoroughly saturated with a weak iodide solution. I generally use one part of the tincture of iodine to three of water painted all over the side of the chest from the apex to the floating ribs, and I have a half jacket of flannel made and worn continuously, so that this becomes impregnated with the iodine, and helps to promote absorption. The internal remedies in which I put the greatest confidence are a combination of iodide of potassium and syrupus ferri iodidi, together with the use of cod-liver oil in debilitated subjects, and where it can be taken without upsetting the digestion; but in cases where the temperature is high, it cannot as a rule be borne. Blisters I do not advocate for universal application, but occasionally a blister will give a stimulus to absorption when that process is going on slowly, so that it is certainly worth while to try this form of counter-irritation in these cases. The blister should not be kept open, but allowed to heal as quickly as possible, as the good it effects takes place during the healing process. I have recently had a patient under my care in the Westminster Hospital, in whom rest and the application of two blisters had the effect of removing a very large pleural effusion, the only medicine he had being a little liq. ammon. acetatis.

If the urine be small in quantity and high-colored, a prescription containing tinct. digitalis, potass. iodidum, potass. acetat., and spiritus atheris nitrosi has proved very useful in my hands.

Dr. Fuller advises the use of the following solution externally:  $\mathcal{R}$ . Hydr. perchlor., gr. iv.; tr. iodi, 3 vi.— $\frac{3}{4}$  j.; glycerini, 3 iij.; aquæ dest, 3 iv., M. ft. lotio. Or as an ointment:  $\mathcal{R}$ . Hydr. perchlor., gr. iv.-v.; ung. iodi, 3 iv.-vi.; adipis,

3 iv.-3 j. ft. ungm. And as a diuretic he gives a pill mass made up of digitalis, squills, and the pilula hydrargyri. This combination has met with the approval of many celebrated physicians. Dr. Matthew Baillie, in speaking of pleural effusion, says: "The medicine which I have found most beneficial has been mercury, combined with squills and digitalis. Five grains of the pilula hydrargyri, combined with one grain of the dried powder of squills and half a grain of the dried powder of digitalis, given twice or thrice a day, have in many cases under my care either very much mitigated or for a time removed the disease. There has been some advantage from the mercury affecting slightly the salivary glands. Squills and digitalis are by themselves much less efficacious than when combined with mercury." Sir Thomas Watson mentions 'this pill with approval, but advises less mercury—one to three grains of the blue pill, with the quantity of digitalis and squills as stated above. But whatever treatment be adopted, the alliterative advice said to have been given by a celebrated living physician, of *beef and beer* being the best absorbents, requires to be followed; as, unless the patient's strength be maintained by good food and tonics, degenerative changes are apt to ensue, and a simple serous effusion become purulent.

This plan of treatment will be successful in a large proportion of the cases brought under one's notice; but in a certain number there comes a time when the question of thoracentesis is mooted. Dr. Fuller advises perseverance in the remedies to promote absorption, so long as the breathing is not seriously embarrassed and the general health does not decline; but for my own part I am inclined to go farther, and say that if, after giving these remedies a fair trial—and I consider three weeks to be ample time—there were then no signs of absorption to any marked extent, I would advise the performance of thoracentesis; because, if done with proper precautions, it is not a risky operation, and it is hardly fair to the patient to allow him to undergo a protracted illness, with the probability of imperfect recovery and a deformed chest, whereas, by accepting the responsibility of advising the operation, the physician would, in the vast majority of cases, have the satisfaction of seeing his patient rapidly gain ground.

Sir Thomas Watson is opposed to the operation in cases of serous effusion. He remarks: "In simple pleurisy it ought never, in my judgment, to be performed, unless the life of the patient is, or seems to be, in jeopardy, from the continual presence of the liquid within the thorax." But in an addendum to his article on Pleurisy he says: "The operation seems more extensively applicable than I had formerly supposed;" though his opinion as regards its use in simple pleurisy remains unchanged.

There are two sets of cases in which thora-

centesis is required in pleurisy, when the effusion is believed to be serous:—

1. Those cases in which the effusion is so great as to threaten to be the immediate cause of death.

2. Cases in which the pleura seems unable to absorb the fluid, and the operation is undertaken to prevent the lung from being irretrievably bound down by adhesions.

As regards the first set of cases, the older physicians seemed to attach only a small degree of danger to an attack of pleurisy; and Dr. Louis went so far as to lay down a law that pleurisy is never an immediate cause of death. That this is far from being true, the instances narrated by Trousseau are quite sufficient to demonstrate, as he says, that "notwithstanding the famous law of Louis, it is possible to die, and to die suddenly, from acute pleuritic effusion." The cause of the fatal termination has not yet been clearly made out; in some cases it is undoubtedly due to the dislocation of the heart so interfering with the proper performance of its functions as to cause sudden syncope. Dr. Evans, in criticising the theory of MM. Blachez and Marrotte, that the obliteration of the pulmonary artery is the cause of sudden death in pleuritic effusion, suggests that the coagula thus formed in the pulmonary artery or its branches may be the cause of the imperfect recoveries so commonly met with in effusions of long standing.

Trousseau gives a most emphatic warning against trusting to the absence of oppression in breathing as an indication that there is no urgent necessity for operating; he says that "oppression is one of the most deceitful of signs," and goes on to say, "It is from auscultation, and still more from percussion, that we must derive our most positive indications as to the opportune moment for performing paracentesis of the chest." I have only notes of two cases in which paracentesis was done when the effusion was serous, and for the relief of dyspnoea. The first one has been reported by Dr. Wardell in his paper on Pleural Effusion; in this case, "63 ounces of clear greenish straw-colored serum was drawn off to the patient's instant and great relief. That evening she could lie on the right side, which she had not been able to do for several weeks. For some days she appeared to progress favorably; she then, without apparent cause, became worse, and gradually sank on April 23rd. Inspection was not allowed." The other case I have already alluded to when discussing the subject of mensuration. This patient had left pleurisy, for which he was twice tapped; the first time 70 ounces of straw-colored serum were evacuated, and nine days later 5 pints of clear straw-colored fluid were let out. On each occasion the patient was suffering from great dyspnoea, and appeared in a very precarious condition;

the relief he experienced was immediate, and the temperature fell. This is a typical instance of the good effect of paracentesis in serous effusion, as the patient eventually made a perfect recovery. One of the most usual of objections, and which would if true be a grave one, is that thoracentesis in a case of serous effusion, by admitting air, is likely to cause suppuration to take place in the pleural cavity; but the case I have just narrated shows that this is not necessarily so, and it would be easy enough to collect innumerable instances in which a chest full of serum has been tapped more than once without altering the nature of the secretion; in fact, I am prepared to go farther, and say that it is possible to convert purulent effusion into a serous one, and a case recorded in the *Lancet* for December 6, 1873, will support this view. The notes are so interesting, and the treatment was so successful, that I venture to give an abstract.

Dieulafoy's aspirator was used in the first instance, and 106 ounces of thick inodorous pus were drawn off, and though there were no signs of the cavity becoming emptied, the operation was now stopped, as a violent fit of coughing came on. In a few days the fluid re-accumulated, and an incision was therefore made close to the former puncture, under a spray of carbolic acid. At least ten pints of pus, of the same character as before, were evacuated. When the flow had diminished sufficiently, a broad piece of drainage tubing, about four inches, was inserted into the cavity, and a very large dressing of muslin and water-proofing applied over the opening, and the patient was loosely surrounded with cotton wadding prepared with carbolic acid, in order to prevent the putrefaction of the discharge. There was a very profuse discharge during the first forty-eight hours, but no decomposition occurred; the quantity rapidly decreased, its character changed, so that on the sixth morning it was entirely serous. On the eleventh day the discharge had ceased, and the pleural cavity closed up. About three weeks later the patient caught cold, and effusion into the pleural cavity again occurred, which proved to be of a serous nature, and was twice drawn off by Dieulafoy's aspirator. The patient eventually made a perfect recovery.

In the second set of cases in which thoracentesis is required, the only *raison d'être* of the operation is that it should be done comparatively early, as "every day that passes increases the liability of the lung to become bound down to the mediastinum by false membranes."

I think that I may say, without fear of contradiction, that the modern school of medicine are unanimously agreed that thoracentesis should be performed immediately that the presence of pus in the pleural cavity is suspected, and, as I mentioned in last year's Reports, the suggestion made by Dr. Ringer to use the ordi-

nary morphia hypodermic syringe to clinch the diagnosis where the general symptoms and physical signs have been somewhat dubious, is most useful, and a great improvement on the grooved needle, as originally suggested by the late Dr. Thomas Davies.

Mr. John Wood gives the following directions for thoracentesis: "Tap in fifth or sixth space under the arm just above the rib, in order to avoid any projection from the rib and the intercostal artery. If you go to the lowest limit of dullness, you may perforate liver or diaphragm. First make an incision, draw the skin down, then introduce your instrument."

Trousseau advises "the sixth or seventh intercostal space, nearly four or five centimetres external to the outer edge of the pectoralis major."

It is better, however, to be guided to a great extent in the choice of the site for the operation by the physical signs as revealed by auscultation and percussion, and I do not see the slightest occasion for over-anxiety to tap at the lowest level of the fluid. Dr. Handfield Jones says, "I certainly prefer to find no breath-sounds in the spot where I am to plunge my trocar;" but he goes on to say that weak and distant breathing need not deter the operator, as lung-sounds can penetrate through a notable thickness of fluid.

*Whether the opening should be closed or left open.*—The rules which I have laid down for myself as regards this question, are as follow:

(a) Whenever the fluid is serous or sero-sanguineous, and so long as it continues such, I close up the opening, so as to prevent the entrance of air; and the best way to effect this is with carbolic plaster.

(b) If laudable pus be evacuated, I close the opening on the first occasion, in the hope that the little left behind may become absorbed; and even a second time I would try the effect of sealing up the orifice, provided the pus continued laudable, and only a small quantity had reaccumulated since the preceding operation. Should these two tapplings not be followed by a cure, then there remains nothing but keeping the openings patent, and this must be done in any case whenever the pus is fetid.

*If left open, by what means should the openings be kept patent?*

This is the question of all others in which I am most interested, as I feel certain that if the practice of making a counter-opening, passing a drainage-tube through, and tying the ends together externally, was more generally adopted much greater success would attend the treatment of empyema. "Where only one opening is present, the pleural cavity may be likened to a barrel without a counter-vent, and the escape of the fluid must be irregular, and only partial." The plan of "drainage" as introduced by Chassaignac for the healing of sinuses,

consists in passing an india-rubber tube of the diameter of the sixth of an inch, perforated at intervals, through the cavity, so that the pus is able to escape as soon as formed through the perforations.

Mr. Campbell de Morgan, in an addendum to the article from which I have just quoted, gives a very clear description of the manner of introducing the drainage-tube. A firm, long iron probe, somewhat bent (for children I find a steel sound very useful), is passed through the first opening, and directed towards the back of the cavity at the most depending part. As soon as the point of the probe can be felt, an incision must be made down to the probe, which is then to be brought through the opening thus made. The drainage tube is then attached to the eye of the probe, and drawn through the two openings, and the ends of the tube are to be tied together, which completes the operation. As regards the after-treatment, all that requires to be done is to envelope the affected side of the chest in picked oakum, which prevents any putrefactive change taking place in the pus after it has flowed from the cavity. Should the oakum irritate the orifices, a small piece of lint steeped in carbolic oil may be interposed at these places. It is astonishing how soon this simple mode of treatment suffices to effect a cure. The last patient I have had under my charge in whom I employed it, had absolutely no discharge on the second day after the operation, though upwards of a pint of pus had been evacuated at the thoracentesis; a few days later there was a little oozing, but this soon ceased, and the tube was withdrawn eighteen days after the operation. Dr. Peitavy records two cases of empyema treated by resection of a portion of the rib, for the purpose of permanently widening the aperture, and so facilitating both the discharge of pus and the injection of fluids. I look upon this as an unnecessarily severe operation, and not required if the drainage-tube be resorted to.

In the able article by Dr. Goodfellow, from which I have already quoted, the history of a case of empyema of five years' standing is recorded. The discharge was profuse, and very fetid; a drainage-tube was introduced, and three months after the operation the discharge scarcely amounted to two or three drachms in the twenty-four hours; and the patient was able to walk in the garden, after being confined to bed for five years. In the other case described in this paper, the counter-opening was not made sufficiently low, so that the matter remained in the chest, became decomposed and extremely offensive. A second counter-opening was made as low down as the probe could be felt through the thoracic wall, and the pus soon lost its offensive odour, and rapidly diminished in quantity. This case affords a very good illustration of the importance of selecting the lowest point for the counter-opening.

#### *Are astringent or other injections indicated?*

In answer to this question I may say that I have been unable to satisfy myself that I have seen much good result from this plan of treatment; and it is one which, if the advice about the drainage-tube be followed, is hardly necessary, as it is only in cases of fistulous empyema with a single opening, and that not at the most depending part of the chest, that there is likely to be any need for the employment of these injections.

If they are used, a dilute solution of liq. potass. permang. (℥ ss. ad quæ Oj.) is about the mildest. Carbolic acid (glycerini acid. carbolic 3 v. ad aquæ Oj.) is one of the most useful; and a weak solution of the tincture of iodine is said to be very useful in cases in which the pleurisy is of a tubercular or strumous origin.

Besides these three drugs, the whole armamentarium of astringent remedies has been exhausted in trying to check the suppuration. The only use I find for injections is to remove factor in cases where it is present; but a free counter-opening soon supercedes the necessity for washing out the pleural cavity. Should the drainage-tube, however, be not sufficient to prevent the continual formation of pus, astringent injections ought certainly to be tried; and in the event of these failing, a fair trial might be given to Dr. Dubone's plan of treatment by tannic acid.

His communication records the result of the treatment of eleven severe cases of fistulous empyema by tannic acid, given in a pill mass with the confection of roses, 10 to 25 grains per diem. In eight cases the treatment was most successful, in one there was partial success, and two died. One half the pills to be given an hour before breakfast, and the other an hour before dinner.—*St. Bartholomew's Hospital Reports*, vol. xii, 1876, p. 75.

#### ON THE TREATMENT OF ABSCESES BY HYPERDISTENSION WITH CARBOLISED WATER.

By George W. Callender, Esq., F.R.S., Surgeon to St. Bartholomew's Hospital.

We are familiar with the good result which follows the washing out of the sac of an abscess with carbolised water, and afterwards draining it. In some cases, however, abscesses are divided by septa, or have extended amongst tissues so as to form several chambers communicating by narrow passages. They are practically multilocular, and, if washed out in an ordinary way, are not effectually treated, because parts of them are apt to be inefficiently cleansed. In the treatment of all abscesses, but more especially for those with branching sinuses, or with a sac broken up by imperfect-septa, we have found it desirable not merely to wash the abscess in what, for distinction, may



be called the ordinary way, but to throw in such a quantity of fluid as will distend the abscess-sac in all its parts; and this procedure we speak of as hyper-distension of an abscess-cavity. In this manner, abscesses complicated in the way I have mentioned may be cured as effectually as are those in which we have to deal with a single cavity.

The operation may be performed whilst the patient is under the influence of ether, or the integuments may be frozen by the ether-spray. The following are required:—A scalpel where an incision is needed, no open sinus existing; carbolic acid lotion (one part in twenty) diluted to one in thirty by the addition of warm water before using it; a perforated elastic drainage-tube; carbolised oil (one in twelve) on lint for dressing the wound, and gutta-percha tissue for covering this; some ordinary adhesive plaster; some tenax to receive any subsequent discharge (which, however, is very slight); an ordinary two or four-ounce syringe. When it is desirable to make continuous pressure over an abscess after opening it a pad shaped to the needs of the case, and filled with shot, will be found useful. It acts more effectually than a sand-bag, and is easily made and adapted.

The operation is begun by cutting into the abscess (if no sinus exists), the opening made being of sufficient size to admit one of the fingers. The pus is then allowed to escape, the abscess being emptied as completely as possible. The nozzle of a syringe is next passed through the opening, and the skin is drawn closely around it by the operator with his left hand; the contents of the syringe are then passed into the abscess-sac. Care must be taken in doing this, that no pressure is made upon the abscess wall, or the distension of the sac will be incomplete. Either by using a syringe which throws a continuous stream, or equally well by closing the wound with a finger whilst the syringe is being refilled by an assistant (very little fluid being lost in its reintroduction), the abscess-sac will presently distend quite to, or even beyond, its original size; and, under these circumstances, the carbolised water necessarily finds its way (as a rule, which has few exceptions) into all parts of the cavity, however irregular, and along any channels leading from it. When the abscess has been opened, the amount of injection may be roughly measured as being rather in excess of the quantity of pus let out. When distension has been effected, the fluid is allowed to escape, and, if much pus be mingled with it, a second injection may be practised. An elastic drainage-tube, its size varying with that of the abscess, is then inserted and secured, and over the end of this, and over the wound, a piece of lint, twice folded and soaked in carbolised oil, is laid. This is covered with a sheet of gutta-percha tissue and some tenax, and these dressings are secured with some ordinary plaster.

Subsequent treatment consists in the renewal of the dressings, which, to myself, it seems desirable to see to daily. The drainage tube is gradually shortened as the abscess-wall contracts, and through its canal, if there be any sign of puriform discharge, a little carbolised water may be occasionally injected.

It is scarcely necessary to add that, under this treatment, the discharge of pus ceases; a limpid serous fluid in small quantity drains away, and presently only a sinus remains; that is, in cases in which there is a persistent source of irritation. These are facts which surgeons have already described.

The point I wish to bring before the Section is, that by hyperdistension of an abscess-sac the carbolised water can be forced into cavities complicated and irregular, and that treatment can thus effect for such complicated abscesses (amongst which may be classed cases of empyema) the same result as an ordinary injection will ensure with a simple abscess.

As for the result of this treatment, so far as bone-caries is concerned, my observations do not at present allow my drawing any absolute conclusions; but that the abscesses connected with such disease can be emptied and reduced to non-suppurating sinuses, and this without causing the least constitutional disturbance, whilst the health of the patient is improved by the cessation of the suppuration, is clearly established.

I may add that, for these as for other cases, we do not employ the carbolised spray, or adopt any precautions during or after the operation beyond those mentioned, taking care only that the well-established rules for surgical treatment are strictly attended to.—*British Medical Journal*, Nov. 4, 1876, p. 579.

#### USE OF THE FORCEPS IN FIRST STAGE OF LABOR.

By Dr. S. G. SWAYNE, Consulting Physician-Accoucheur to the Bristol General Hospital.

"The first stage of labor must be perfectly finished before we think of applying the forceps." This is Denon's fourth aphorism, and is a rule of practice which has held almost undisputed sway for nearly a hundred years. In the present day, however, the motto of the accoucheur may be said to be "Nullius addictus jurare in verba magistri." No truth is considered to be so firmly established that it is taken for granted and allowed to pass without question. The modern accoucheur does not feel bound to swear by a particular rule of practice because it was that of his "old master" at London, Edinburgh, or Dublin, as the case may be, but reserves his judgment until he has had frequent opportunities of testing it for himself by his own experience. This is the case very

much with the use of the forceps. In no branch of obstetrics have we departed so much from the precepts and practice of our forefathers as in this. The forceps is now used with much greater freedom than it was formerly, and, as experience has abundantly proved, with the best effects. For instance, about thirty years ago, according to Dr. Churchill's statistics the forceps was not used in British practice as often as once in three hundred cases. A reluctance to resort to this instrument was at that time the especial characteristic of the Dublin School. This, no doubt, was greatly due to the precept and example of Dr. Joseph Clarke, who was master of the Rotunda Hospital from 1787 to 1793. According to the first report of that hospital published by him, he used the forceps only once in every seven hundred and twenty-eight cases, and his biographer further states that he only used it "once in the multitude of cases under his care in private." Dr. Collins, who was master of the rotunda from 1826 to 1833, scarcely employed the forceps with greater frequency; for he records but twenty-four forceps cases in a total of 16,414.

In the present day, on the contrary, the Dublin School of Midwifery is pre-eminent for skill and boldness in employing and developing the great capabilities of this most valuable aid to labor. We find, from Dr. George Johnston's report of the Rotunda Hospital for 1869, 1870, and 1871, that, of 3,338 women delivered in the hospital during that period, 227 were assisted by the forceps, being at the rate of 1 in 14.74. This increased use of the forceps is attended, as Dr. Kidd has pointed out, with a diminished maternal mortality, but more especially with a most important saving of infant life, chiefly because the forceps is now employed in Dublin in difficult cases, which would formerly have been delivered by the perforator.

Within the last five years, however, a still more startling innovation has arisen in obstetric practice, viz., the use of the forceps in the first stage of labor. In his report of the Rotunda Hospital for 1872, Dr. George Johnston remarks: "In thirty-five instances, we were obliged to employ the forceps before the os was fully dilated, twenty-seven being primiparæ and eight multiparæ. In thirty of these, the interference was considered necessary, in consequence of the os uteri continuing undilated, apparently the result of the too early rupture of the membranes and the escape of the liquor amnii."

In his report for 1873, Dr. Johnston again gives thirty-six cases in which the forceps was applied before the os uteri was fully dilated, and remarks: "As there may still be many who will be astonished at this apparently bold mode of practice, and mayhap question its justifiability, I beg leave to assure them that, having adopted it for the last two years, during which

time we delivered seventy-one such cases, we are more and more convinced every day of its great advantage in saving the lives of both mother and child. He then gives an analysis of the above thirty-six cases, and calculates the amount of expansion of the os uteri in each at the time of the operation, four inches being assumed to be the utmost dilatation of the os uteri, and this diameter of four inches is divided into five parts. "In eleven instances, the forceps was applied when the os was but two-fifths dilated, when, in fact we were obliged to expand it with our fingers before we could pass the blades, and in every instance both mother and child were saved, with one exception, a case of convulsions, which was brought in comatose. In twenty-two instances, where the os was three-fifths dilated, all the mothers recovered but one, and all the children but two, which were cases of prolapsed funis. In three instances where the os was four-fifths dilated, the mothers recovered and children lived. The position of the head with regard to the pelvis, at the time when the forceps was employed:—In two cases, the head was above the brim; in fourteen in the brim, and in twenty it was in the cavity. Result: All the mothers recovered but two, one of which, a primipara, who was very delicate and anæmic on admission, died of peritonitis, with uterine diphtheritis; the other, also a primipara, was admitted comatose and in convulsions."

Before a mode of practice so contrary to all precedent can be regarded with favor by obstetric practitioners, it is necessary that the experience of a great number of observers should be recorded. As a report even of a limited number of cases in private practice is of use in this respect, I propose to give my own experience of it, first premising that I adopted this novel method of using the forceps with my mind strongly prejudiced against it as a piece of "meddlesome midwifery" of the most dangerous description. The following cases will show whether my prejudice was well founded:—

1. About 1 a.m. on July 16th, 1875, I received a message from Mr. James, requesting me to see Mrs. S., Windsor Terrace, Woolcott Park, whom he was attending in her first confinement. The pains first commenced at 9 a.m. on July 14th, and, when I saw her, the os uteri was only dilated to the size of about three inches in diameter. The pains had gone on continuously and she was feeling exhausted. We, therefore, determined to apply the long forceps. The presentation was natural, the head tolerably low in the pelvic cavity, and I could just reach the ear behind the right pubis. I used Simpson's long forceps. There was not much difficulty in applying it, and in less than an hour I delivered her of a male child alive and tolerably vigorous. The os uteri and the perineum presented very little obstacle to the passage of the head. She did well.

2. On July 21st, 1875, I attended Mrs. T., Miles Road, in her third confinement. The labor began at 4 a.m., on July 31st. The first stage was tedious, and, for four hours after the membranes were ruptured, the head remained high up in the pelvis and the os was scarcely dilated to three inches in diameter. As no progress appeared to be made, I applied the long forceps, and, after some difficulty, delivered her of a very large male child, alive and vigorous. The os was dilated to about three inches in diameter when the forceps was applied, but it did not present any difficulty, as it was soft and dilatable. She recovered well.

3. On June 28th, 1876, I attended Mrs. C., Clifton Park Road, in her first confinement. Labor began at 4 a.m. on the day previously, but the os uteri was very rigid, and, though there had been regular pains throughout the day, it was not dilated larger than a shilling at 10 p.m. I was called up to her at 1.30 a.m. The membranes had just ruptured and the pains were much stronger, but the os was not larger than a half-crown. I then felt the anterior fontanelle towards the right acetabulum, and by pressure on the right parietal eminence, succeeded in bringing the occiput round to the left acetabulum. The os uteri still continued very rigid, and by 7 a.m. was not larger than a crown-piece. I therefore used Dr. Barnes' long forceps, and, after some time and trouble, delivered her of a large male infant, alive and well, about 8.45 a.m. The pelvis was not very roomy. Some *post partum* hemorrhage followed. It was restrained by cold, pressure, and ergot. The perineum, notwithstanding careful support, was lacerated near to the sphincter. I therefore used three wire sutures. The tear healed by the first intention, and the patient made a good recovery.

4. On September 3rd, 1876, I attended Mrs. S., in Caledonia Place, in her first confinement. She was a blonde, tall, robust in make, and about 36 years of age. Labor commenced five days previously, and the pains of the first stage continued at intervals all that time. The os uteri was rigid and yielded very slowly. About 5 p.m. on Sept. 2nd, it was dilated to the size of a crown. About 9 p.m. it had dilated to the size of the bottom of a tumbler, or a little over two inches in diameter, and the membranes gave way. The pains were regular, but not very frequent. The os uteri continued in much the same state until the next morning, the head being in the pelvic cavity. I could not reach the ear, but I could feel the great fontanelle opposite the right acetabulum. The os uteri was now about two inches and a half in diameter. As the labor had become very tedious, I applied Dr. Barnes' forceps, and, after about four hours, delivered her of a large male child that had apparently been dead for some hours. I concluded that such was the case, because the

liquor amnii was much colored with meconium, and the skin had peeled from a considerable part of the head. The patient made a good recovery.

The above cases, it will be observed, corroborate the testimony which Dr. Johnston has given in favor of the employment of the forceps, under certain circumstances, during the first stage of labor. In all, the result was good as regards the mothers, and also the children, with the exception of No. 4, in which the child was still-born; but, in this case, the death of the infant appeared to have occurred before the forceps was used. It will be observed also that, in one case (No. 2, a third confinement), the delay in the labor did not arise from a rigid os, but from a disproportion between the head and the pelvis, causing the head to be arrested at the pelvic brim. The diameter of the os uteri did not exceed three inches, simply because the head did not press down sufficiently upon it after the waters had escaped. This incomplete dilatation of the os uteri in cases of contracted pelvic brim has long been familiar to accoucheurs, and has not been considered to be an obstacle to the performance of craniotomy, or even to the careful employment of the long forceps. It is far different, however, in the other three cases, which were primiparæ, and in which the insufficient dilatation was the result of the rigidity. In these, the forceps would have been formerly considered to be quite inadmissible, mainly, no doubt, for two reasons: first, because the dangers and difficulties attending its use are much greater in the first than in the second stage of labor; and, secondly, because as Dr. Churchill's statistics show, a protracted first stage is not *per se* dangerous either to the mother or the child. He admits, however, that a protracted first stage may, by inducing fatigue and exhaustion, act unfavorably on the second stage. I had once a well-marked instance of this kind. The patient, a primipara aged 30, had been in labor five days before the os uteri became dilated to the size of a crown. The anterior lip of the rigid os uteri then gave way, and a considerable rent took place. The second stage went on well for a time, until the pains almost ceased from sheer exhaustion. I then applied the forceps and delivered her, but the prostration which ensued was so great that the patient nearly lost her life. In this case all the usual remedies for relaxing the os uteri had been tried, but without effect. I have little doubt that, if the forceps had been applied during the first stage, the result would have been much better. One great object in using the forceps is to anticipate evil rather than to remove it when it exists. Before adopting craniotomy, the accoucheur should be satisfied that urgent symptoms exist which render prompt delivery imperative. With the forceps, however, it is far different. It is so safe

an instrument in moderately skilled hands, that it ought to be employed before any symptoms of powerless labor set in. No one in the present day would think of endangering a woman's life by waiting, as Denman recommended, until the pains of labor had ceased and the head had been six hours as low as the perineum. It is quite a sufficient justification for using the forceps that the progress of labor has been arrested for a time, and that the head has ceased to advance. When the forceps is thus employed in good time, the accoucheur can take time about the operation and imitate nature as closely as possible; but, if he wait for symptoms of powerless labor, he will have to deliver in too great a hurry, and when his efforts are not efficiently seconded by the pains. In the first stage of labor, above all, the delivery should be effected slowly and cautiously. Urgent symptoms have not yet set in, and the accoucheur can, therefore, afford to wait. He should only extract during the pains, and should not mind if the operation occupy three or even four hours, as it did in my last case. He will thus give ample time for the soft parts to dilate and avoid the danger of lacerations.

My experience, then, of the application of the forceps during the first stage of labor is, that the operation, when properly performed, is safe, and very often useful, although seldom imperatively demanded; moreover, that it requires a considerable amount of that *tactus eruditus* which can only be acquired by practice, and, therefore, it should not be performed by any man until he has used the forceps at least a dozen times during the second stage of labor; and I am induced, on the whole, to agree with Dr. Playfair's conclusion that, "if the os be not fully dilated, but is sufficiently so to admit of the passage of the forceps, the operation under urgent circumstances, may be quite justifiable, although it must necessarily be a somewhat anxious one.—*British Medical Journal*, April 28, 1877, p. 508.

## THE CANADA MEDICAL RECORD

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MONTREAL, AUGUST, 1877.

We are glad to learn from many sources that our remarks in our last issue, concerning the Tri-Annual Meeting of the College of Physicians and Surgeons, have met with very general approval. We trust that they may result in a much more personal interest being taken in all

the proceedings of the College. Without this direct interest from those who in reality should be the guiders of its destiny—an effective governing board cannot be elected. The more we consider the proceedings at Three Rivers the more unfortunate do they seem to us. Never, in our experience, have we seen a meeting, composed presumably of gentlemen, conduct themselves with so utter a disregard of the simplest rules of a deliberative assembly. Order and decorum there was none—and it was impossible to consider several points of importance which were brought forward and attempted to be discussed. The arguments used by several, whose position and experience should have carried weight, where reason held sway, were lost in the roar and babel of voices. We drop the curtain, but trust, in all charity, we may never have such a meeting repeated.

### THE CANADIAN MEDICAL ASSOCIATION.

This Association meets in Montreal on the 12th of September, and from what we can learn, there is every prospect that the attendance will be large. Quite a number of very interesting papers are already on the programme, so that a profitable as well as a pleasant time is anticipated. We believe that a Reception Committee has been appointed to look after the entertainment of the guests.

### PERSONAL.

Dr. Lachapelle has been appointed Professor of Hygiene in Victoria Medical School.

Dr. Neilson, of B. Battery of Canadian Artillery, sailed from Quebec by the Allan Steamship *Sarmatian*, on the 25th of August. We understand that Dr. Neilson is sent to Europe by the Dominion Government, to undergo a special course of Military Medical training at Netley Hospital.

Dr. Burroughs, of Quebec, is attached to B Battery, and will perform duty with it during the absence of Surgeon Neilson.

Dr. Henry Shoebottom, (M.D., McGill College, 1855,) has removed to Port Huron, Mich., from Sarnia, Ont.

At the meeting of the London Obstetrical Society, held on the 2nd of last May, Dr. Barnes exhibited, for Dr. Scott, of Woodstock, Canada, a pessary for complete

proidentia uteri. It was constructed of wire, covered with rubber. The upper part consisted of a loop, which was intended to rest behind the cervix. The stem curved backwards, over the perineum, and was supported, like Cutter's pessary, by a band which passed posteriorly. It thus was able to yield with the movements of the body. He had used it in about half a dozen cases, and found it to answer well. The patient could place it herself. The instrument could be obtained from Messrs. Blaise or Weiss.

#### PHARMACEUTICAL ASSOCIATION OF THE PROVINCE OF QUEBEC.

The annual meeting of this Association was held in their lecture room, in Montreal, on Tuesday, June 12th, at 11 a. m., H. R. Gray, Esq., President, in the chair.

After the minutes of the previous annual meeting had been read and duly confirmed, and other routine business disposed of, the President delivered a very interesting address, setting forth the progress of the Association since its incorporation in 1870, until the present time, and expressing the hope that the members, stimulated by previous success, would press forward to a higher standard as pharmacists. After the delivery of the President's address, Mr. E. Muir, Registrar and Secretary, was called upon to read the annual report, and, among other points, referred to two of a very important character, namely, that of physicians keeping drug stores, without being obliged, as others, to register, and the sale of drugs and medicines by grocers and general store keepers. The report recommended the incoming Council to take steps to have the Act of 1875 so amended as to oblige all persons, whether physicians, or otherwise, to be registered as "Licentiates in Pharmacy" before they could keep open stores for the retailing of drugs and poisons.

Mr. Mercer moved the adoption of the report, and in doing so referred to the interesting and instructive address delivered by the President, paying that gentleman a high eulogy upon it, and stating that it was evident that the writer was fully aware, from personal experience, of the duties and trials of a dispensing chemist, and fully alive to the advantage of combining with his every day duties the higher and more scientific branches of pharmacy.

The ballot for the election of Council resulted in the following gentlemen being duly elected, namely: H. R. Gray, J. D. L. Ambrosse, R. W. McLeod, T. J. Tuck, E. Giroux, H. F. Jackson, A. Manson, and Jas. Goulden. These with the following, who remain

in office, namely, N. Mercer, J. Kerry, H. Lyman and E. Muir, will compose the Council of the Association for the year 1877-8. The auditors elected were W. B. Clare and D. Watson. Votes of thanks were carried to the returning officers for their services during the past year, and also to the editor of the PHARMACEUTICAL JOURNAL of Toronto for the various notices of their meetings which had appeared in this paper.

At a subsequent meeting held in Laval University, Quebec, on Wednesday, June 20th, the following officers were elected for the year 1877-8, namely: Edmund Giroux, Quebec, President; Alex. Manson, 1st Vice-President; Roderick McLeod, Quebec, 2nd, Vice-President; John Kerry, Treasurer; E. Muir, Registrar and Secretary. Board of Examiners:—J. B. Martel, Quebec; Roderick McLeod, Quebec; N. Mercer, Alex. Manson, H. R. Gray, J. D. L. Ambrosse and H. F. Jackson, Montreal.

At a meeting of the Board of Examiners held in Laval University, Quebec, the following candidates were successful, and the Registrar was authorized to issue their respective certificates, namely: Geo. W. Cook, A. E. Michon, Paul Matthie, as "Licentiates in Pharmacy;" Fortunat F. Gauvreau, as "Certified Clerk;" and Henry Vernier and C. E. Hardy, as certified apprentices.

#### MEETING OF THE MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

JULY 6TH, 1877.

The president, Dr. Fenwick, occupied the chair.

Dr. Osler exhibited a sacculated aneurism of the innominate artery. The patient died suddenly, death resulting from effusion of blood into the pericardium through a small perforation, in a sacculus, no larger than a pin head situated on the aorta. The sac was nearly filled with a laminated coagulum. Ligature of the carotid and axillary had been proposed in this case, but the patient would not submit. The arteries generally were atheromatous.

Dr. Fenwick exhibited a specimen of stone which he had removed two days before. Two were found in the bladder of peculiar shape and size, resembling four or five cloves fastened together at their bases. He also exhibited a portion of a skull fractured along the frontal bone, the fissure extending to the orbital plate of that bone. From the same patient was taken a large clot, half as large as a fist, adherent to the dura-mater, between it and the bone.



Dr. Fenwick described the symptoms of the case which were plainly those of compression. Trephining had been performed about 16 hours after the accident with manifest improvement in the symptoms.

Dr. Fuller exhibited a galvano-cautery made by Mr. Wells (corner of Condé and Wellington sts.) The mechanism of this instrument was thought very good. Price \$5.00.

Dr. Fuller then read a paper on the treatment of meningitis.

The reader reminded his hearers of the two stages of meningitis, 1st cerebral excitement, 2nd coma as a result of effusion. This division was not in accordance with post mortem observations. In few cases is there found compression by fluid, but generally there is a small quantity of fluid in the ventricles and also semi-solid lymph in the subarachnoid spaces at the base, these being insufficient to cause coma by compression. He cited a case in which when apparently there was fluid in the brain, a trocar was plunged into the lateral ventricles two days before death and no fluid escaped. He infers that coma is not due to compression, but to irritation, central or peripheral. Irritation of the brain produces, 1stly excitement, 2ndly coma; of a motor nerve produces 1stly spasm, 2ndly paralysis; of a vaso-motor nerve, 1stly pallor, 2ndly flushing; of a sensory nerve, 1stly pain, 2ndly anæsthesia. He cited a case which he had attended with Dr. Rodgers in which there were manifest signs of meningitis from which recovery followed the exhibition of gr.  $\frac{1}{2}$  doses of morphia.

He summarises as follows:

1st. That coma is in most instances not due to the pressure of effusion, but to irritation.

2nd. That opiates are not contraindicated in meningitis even when coma is present if there be irregularities of the cutaneous circulation, and that opium by relieving irritation dissipates the coma.

3rd. That warm water is more agreeable, more soothing, and more efficacious than ice caps.

Dr. Rodgers confirmed Dr. Fuller's observations with regard to the inutility of bromide of potassium.

Dr. Trenholme thought that if the theories advanced could be proved, then a great advance had been made. He had used belladonna, of

the tincture  $\text{my. } \frac{1}{2}$ , or of the extract gr.  $\frac{1}{2}$ , 1-10. When the liver is sluggish and tongue coated he used antimony. He approves of hot applications.

Dr. Reddy speaks highly of the treatment by leeching and opium. Uses hot applications in nervous headaches in hysterical and anæmic women.

Dr. Kennedy would hesitate to use opium in meningitis. If coma be caused by anæmia of the brain then opium would be beneficial and so would ergot.

Dr. Osler drew the attention of the meeting to the fact that the treatment was old. At autopsies tubercle was often over-looked and effusion is often not recognized unless the ventricles are examined *in situ*. He considered the reports of the cases very unsatisfactory.

A vote of thanks to Dr. Fuller was proposed by Dr. Kennedy, seconded by Dr. Loverin.

Dr. Reddy narrated several cases of rapid union of wounds without suppuration, by dressing with Friar's Balsam.

J. D. CLINE, B.A., M.D., *Secretary*.

A breach of promise suit was recently brought against a clergyman of Leicester, England, and, amongst other facts brought forward, in order to prove that the defendant was a gentleman of peculiar habits, was that of his having taken five pills a day, during a period of ill health which extended over thirty years. According to this he must have swallowed some 55,000 pills—a fact which certainly entitles him to rank as one of the chief pillars of the church.

#### SPERMATORRHEA TREATED BY ELECTRICITY.

M. Verneuil of Paris, as mentioned in the *Doctor*, has invented, for the treatment of an unmanageable case of nocturnal erections, with seminal emissions, an electric alarm, by which a little bell is sounded, and the patient awakened, whenever the erection commences. A very light metallic ring connects the penis with the pole of a battery. We should think the old-fashioned ring, with the teeth on the inner circumference, would answer a better purpose, and in a more silent manner.

#### FASHIONABLE ENTERTAINMENTS FOR THE WEEK.

"Going to the Throat and Ear Ball, Lady Mary?"  
 "No; we are engaged to the Incurable Idiots."  
 "Then perhaps I may meet you at the Epileptic Dance on Saturday?" "Oh yes, we are sure to be there. The Epileptic managers are so delightful."  
 — *London Punch*.

## Original Communications.

### CANADA MEDICAL ASSOCIATION.

#### FIRST DAY.

MONTREAL, 12th September, 1877.

The tenth annual meeting of the Canada Medical Association was held this day in the Windsor Hotel, Montreal, when were present Drs. Hingston, President; Robillard, Treasurer; David, General Secretary; Osler, Parker, Botsford, Fenwick, Wilkins, Zimmerman, Canniff, Workman, Playter, Reed, Fulton, Sweetland, Grant, Russel (Quebec,) Worthington, Atherton, Hornibrooke, Bascom, Michaud, Gibson, Coleman, Mullins, Wheeler, G. W. Campbell, F. W. Campbell, Gardner, Buller, Chevalier, Schmidt, Ross (Montreal,) Bell, Larocque, Roddick, McCallum, Howard, Reddy, Reeve, and others.

The PRESIDENT opened the meeting at 10.30. The minutes of the last day's proceedings of last year's meeting at Toronto were read and confirmed.

On behalf of the Committee of Arrangements, Dr. OSLER reported the list of papers to be read, and that the credentials of Dr. Kimball, Lowell; Dr. Wing, Boston; and Dr. Brodie, Detroit, Delegates from the American Medical Association; Dr. Adams, Island Pond, Delegate from the Maine Medical Society; Drs. Ridley and Covernton, Hamilton Medical and Surgical Society, and Dr. Ecroyd, Union Medical Association of Wellington and Grey, were all correct.

The PRESIDENT welcomed the presence of these gentlemen at the meeting, and requested them to accept seats on the platform, as was also Dr. Workman and others.

The following gentlemen having been duly proposed and seconded, were severally elected permanent members:

Dr. Charles Covernton, Simcoe; Dr. A. Proudfoot, Montreal; Dr. E. Berthelot, Montreal; Dr. L. O. Thayer, Montreal; Dr. Richard MacDonald, Montreal; Dr. O. C. Edwards, Montreal; Dr. C. J. Morse, Montreal; Dr. R. A. Kennedy, Montreal; Dr. A. Alt, Toronto; Dr. Whitford, Ottawa; Dr. J. B. McConnell, Montreal; Dr. George Armstrong, Montreal; Dr. W. F. Coleman, St. John, N.B.; Dr. R. Levi, Inverness; Dr. J. Perrigo, Montreal; Dr. J. L. Leprohon, Montreal; Dr. A. Johnston, Yorkville, Ont.; Dr. Molson, Montreal; Dr. Wm.

McDonald, Montreal; Dr. J. W. Burgess, London, Ont.

On the motion of Dr. ROBILLARD, seconded by Dr. DAVID, Dr. Pean, surgeon in chief of the Paris Hospital (France), was elected an Honorary member.

Letters of regret at not being able to attend the meeting were read by the GENERAL SECRETARY from Dr. J. T. Steeves of St. John, N.B., and Dr. Daniel Clark of Toronto.

The GENERAL SECRETARY submitted a Report from Dr. Jennings of Halifax on the climate of Nova Scotia, which was referred to the Committee on Climatology.

The PRESIDENT then delivered his address.

Dr. PARKER, seconded by Dr. G. W. CAMPBELL, moved a vote of thanks to the President for his able and comprehensive address, hoping it would not pass away without producing the good results intended. Dr. Parker hoped it would be published, or at least such portions of it as Dr. Hingston should deem desirable. This motion was carried by acclamation.

Dr. GEORGE ROSS, Chairman of the Committee on Medicine, read the report:—

Dr. R. P. HOWARD, Chairman of the Committee on Medical Education and Literature, made report:—*See transactions.*

No reports were received from the Committees on Surgery, Obstetrics, or Therapeutics and New Remedies.

It was then moved by Dr. R. P. HOWARD, seconded by Dr. GRANT: That the Association resolve itself into two sections, one of Medicine and one of Surgery, and that these sections meet at two o'clock on each day for the reading and discussion of the different papers, which motion was carried, and Dr. Parker was named Chairman of that of Medicine, with Dr. George Ross as Secretary; and Dr. Canniff, Chairman of that of Surgery, with Dr. McConnell as Secretary.

Dr. GRANT moved, seconded by Dr. GIBSON, that the following members compose the Nominating Committee: Drs. Workman, Canniff, Fulton, Sweetland, Fenwick, Worthington, Osler, F. W. Campbell, Rottot, Parker and Botsford, which was carried, and the meeting adjourned for an hour—lunch being served in the Hotel.

After adjournment Dr. WILKINS exhibited his beautiful and extensive apparatus on Practical Physiology and Histology.

Dr. OSLER exhibited microscopes and other apparatus.

Dr. RODDICK exhibited and explained a full and complete set of Lister's antiseptic apparatus.

A. H. DAVID, M.D.,  
*General Secretary.*

The Sections opened at 2.15 p.m.

In the Medical Section Dr. R. P. HOWARD read a paper on TRICUSPID STENOSIS, which was discussed by Dr. Hornibrooke, and others, and a vote of thanks, on the motion of Dr. WORTHINGTON, seconded by Dr. MICHAUD, was unanimously passed to Dr. Howard for his very learned and able paper.

Dr. FULTON read an interesting paper on the TREATMENT OF EMPYEMA, by tapping and the introduction of the drainage tube and the injection of tincture iodine and carbolic acid.

An animated discussion followed, in which Drs. Parker, Howard, Fuller, Hornibrooke and Ross took part. The thanks of the Section were cordially voted Dr. Fulton.

Dr. HORNIBROOKE read a paper entitled PLEA OF INSANITY. Drs. Botsford, Workman and Mullin discussed Dr. Hornibrooke's paper, and the result was that the subject was considered a matter for the Dominion Government.

A vote of thanks to Dr. Hornibrooke was moved by Dr. BOTSFORD, seconded by Dr. WORKMAN, and unanimously carried.

On motion it was resolved that all the papers read in this Section this afternoon be referred to the Publication Committee as worthy of being published in the transactions of the Association.

The Section then adjourned.

(Signed,) GEO. ROSS, M.D.,  
*Secretary.*

In the Surgical Section :

Dr. ALT read a paper on EPITHELIOMA OF THE EYE, which was discussed by Drs. Buller, Coleman and Proudfoot, and after a vote of thanks to Dr. Alt, the paper was recommended for publication by the Committee.

Dr. ROBILLARD next read a paper on GASTROTOMY and OVARIOTOMY, exhibiting and explaining a complete set of instruments used in these operations which he had brought out with him from Paris, and also a Thermo-Cauter of Dr. Paquélon, for which a cordial vote of thanks was tendered to Dr. Robillard. Dr. Kimball of

Lowell made several observations on ovariotomy, and complimented Dr. Robillard on his lucid explanations of every step of the operation. Drs. Hingston, Thayer and Trenholme also spoke on the operation of ovariotomy.

Dr. REEVE read a paper on NASAL POLYPUS, which was ably discussed, and a vote of thanks passed to Dr. Reeve.

On motion the Section then adjourned.

(Signed,) J. B. McCONNELL, M.D.,  
*Secretary.*

## SECOND DAY.

SEPTEMBER 13TH, 1877.

The following members being present : Drs. Hingston, Workman, Hornibrooke, Sweetland, Canniff, Osler, Bessey, Thayer, Bascom, C. Covernton, T. S. Covernton, Reddy, Larocque, Leprohon, Gardner, Parker, Fulton, Robillard, Fenwick, Proudfoot, Molson, Mullin, Gibson, Atherton, Worthington, Fuller, Zimmerman, G. W. Campbell, Howard, F. W. Campbell, Schmidt, David, Cline, W. McDonald, and others.

The President took the chair at 10.30.

The minutes of yesterday's meeting were read and confirmed.

Drs. Parker, Grant, Botsford and Brodie of Detroit, Adams of Island Pond, and Workman were requested to take seats on the platform.

The following gentlemen having been proposed and seconded were elected permanent members : Dr. Lamarche, Montreal ; Dr. Park, Montreal ; Dr. Buller, Hamilton ; Dr. A. B. Ward, Montreal.

On motion of Dr. FENWICK, seconded by Dr. ROBILLARD, Dr. J. R. Cormac of Paris, France, was elected an honorary member, and Dr. Botenturst, editor of the *France Medical*, elected as corresponding member of the Association.

Letters of regret at not being able to be present at this meeting were read from Hon. Dr. Ross, Quebec ; Harrington, St. John, N.B., and Rosebrugh, Hamilton, the latter informing the Association that he would have the paper he had intended reading published, and a copy sent to each member of the Association.

The SECRETARY then read a letter from the Hamilton Medical and Surgical Society, kindly inviting the Association to hold its next year's session in Hamilton.

Dr. WORKMAN called attention to accounts for the yearly subscription not being sent to members, as he knew some who paid for six years at last year's meet-

ing, and would recommend that accounts be sent to every member yearly. This was considered right, and the Treasurer and General Secretary were requested to attend to it.

Dr. CANNIFF, seconded by Dr. LEPROHON, moved that this Association reiterates the opinion expressed at last year's meeting in Toronto, "That a committee be appointed to prepare a memorial to present to the Dominion Government, relating to the subjects of Vital Statistics and Public Hygiene," and that the following gentlemen compose this committee: Drs. Hodder, Hingston, Workman, D. Clarke, Playter and the mover and seconder, which motion was agreed to.

Dr. FULTON, as Chairman of the Committee on Therapeutics and New Medicines, then read the report.

Dr. THAYER, seconded by Dr. LAROCQUE, gave notice that he would move at the next meeting of the Association, "That application be made to the Local Governments to keep three or four heifers in a convenient place, for the purpose of supplying medical men with vaccine virus derived directly from the cow."

Dr. OSLER, as Chairman, laid the report of the Committee on Necrology on the table.

On motion the report of the Nominating Committee was deferred until 4.30 p. m.

Dr. BOTSFORD reported verbally for the Committee on Climatology.

The Right Hon. Lyon Playfair, C.B., &c., &c., M.P. for the University of Edinburgh, having entered the room, was introduced to the meeting by the President, and requested to take a seat on the platform, and on the motion of Dr. Hingston, Dr. Playfair was by acclamation elected an Honorary member of the Association. Dr. Playfair made a graceful acknowledgment of the honor paid him.

Dr. Taylor, of Edinburgh, was also requested to take a seat on the platform.

Drs. PARKER, WORKMAN, BESSEY and GRANT spoke on the subject of Dr. Botsford's remarks about Vital Statistics, the latter stating he thought the Dominion Government would do all in its power.

Dr. WORKMAN read a paper on Crime and Insanity, which was to have been read in the Medical Section yesterday, but by request was read in General Session.

Dr. MULLIN made a few observations, when it was moved by Dr. HORNIBROOKE, seconded by Dr. PARKER, "That in the opinion of this Association it is desirable in all criminal trials when medical opinion sug-

gests the possibility of mental unsoundness, the accused should be placed under the supervision of experts for a sufficient time to enable them to determine whether he was insane or not at the time the crime was committed."

Dr. PARKER earnestly supported this motion.

Dr. BRODIE, of Detroit, also addressed the meeting on the subject, and concluded by saying in his State, Michigan, capital punishment had been superseded by imprisonment for life.

Dr. F. W. CAMPBELL also spoke on the matter, when Dr. Hornibrooke's motion was put to the meeting and carried unanimously.

Dr. R. P. HOWARD made a few observations on the question, and gave notice that he would move the following at the next meeting: "That it is in the interest of justice that when anti-mortem examinations are to be made, experts familiar with such scientific works should be employed by the Crown when procurable."

The meeting then adjourned.

A. H. DAVID, M.D.,  
General Secretary.

The Sections met at 2 p. m., and at 4.30 p. m. the General Session resumed business, the President being in the chair.

The minutes of the morning's meeting were read and confirmed.

Dr. Lachapelle, of Montreal, was elected a permanent member.

Dr. PARKER, as Chairman of the Medical Section, reported that a paper on Addison's Disease had been read by Dr. George Ross, which was discussed by Drs. Parker, Zimmerman, Howard and Hornibrooke.

A paper by Dr. Workman on the use of large doses of acetate of lead in *post partum* and other hemorrhages, which was followed by an interesting discussion in which Drs. Mullin, Howard, David, Reddy and others took part.

A case of progressive pernicious anemia by Drs. Bell and Osler, and Dr. Larocque began his papers on Vital Statistics, but was obliged to stop owing to a message from the President asking the Section to join the general meeting. It was consequently resolved that the following papers be considered as read and handed to the Committee on Publication: Dr. Larocque, Vital Statistics; Dr. Playter, Economical Aspects of Public Sanitation; Dr. Proudfoot, Case of Supposed Gummy Tumor of Brain.

In the absence of Dr. Canniff, Chairman, Dr. MCCONNELL read the report of the Surgical Section.

Dr. TRENHOLME read a paper on Vesico Vaginal Fistula, which was discussed by Drs. Hingston, Fenwick, Godfrey, Grant, and a vote of thanks was proposed and carried to Dr. Trenholme for his paper.

Dr. FENWICK next read a paper on Excision of the Knee, which was discussed by Drs. Grant, Atherton and Canniff, and a vote of thanks was cordially passed to Dr. Fenwick for his instructive paper.

Dr. BULLER then read a paper on Embolism of the Central Artery of the Retina, which on motion was referred to the Committee on Publication with a vote of thanks to Dr. Buller for his very able paper.

As the time of the lecture was up, Dr. REEVES asked to lay his paper on Optical Defects on the table, and on motion it was referred to the Committee on Publication.

Dr. Canniff's paper on Various Wounds and their Treatment, was also referred to the same Committee.

Dr. REEVES placed before the Section a specimen of epithelioma of the eye with explanatory notes.

A vote of thanks was then passed to Dr. Canniff for the able manner in which he had conducted the business of the Section.

Dr. PARKER called the attention of the meeting to the number of valuable papers that had been offered at this meeting, for which there was not time to have read, and moved, seconded by Dr. WORKMAN, "That it be suggested to the Committee of Arrangements that for the future the session be of three days if necessary," which motion was carried unanimously.

Dr. OSLER, on behalf of the Nominating Committee, reported the following gentlemen as the officers for the following year: Dr. Joseph Workman, of Toronto, as President; Dr. David, of Montreal, as General Secretary; Dr. Robillard, of Montreal, as Treasurer; Dr. McDonald, of Hamilton, as Vice-President for Ontario; Dr. Worthington, of Sherbrooke, as Vice-President for Quebec; Dr. Cowie, of Halifax, as Vice-President for Nova Scotia; Dr. McLaren, of St. John, as Vice-President for New Brunswick; Dr. Sweetland, of Ottawa, as local Secretary for Ontario; Dr. F. W. Campbell, of Montreal, as Local Secretary for Quebec; Dr. John Black, of Halifax, Local Secretary for Nova Scotia; Dr. Atherton, of Fredericton, Local Secretary for New Brunswick.

#### COMMITTEES.

*On Publication.*—Drs. David, Robillard, F. W. Campbell, Howard and Osler.

*On Medicine.*—Drs. Mullin, Hamilton; Ross, Montreal, and Lamarche, Montreal.

*On Surgery.*—Drs. Malloch, Hamilton; Grasset, Toronto, and Farrell, Halifax.

*On Obstetrics.*—Drs. Rosebrugh, Hamilton; N. Ogden, Toronto, and Trenholme, Montreal.

*On Therapeutics, New Remedies, and Medical Jurisprudence.*—Drs. J. G. Kennedy, Toronto; A. H. Kollmyer, Montreal, and Woodhill, Halifax.

*On Necrology.*—Drs. Riddle, Toronto; Lachapelle, Montreal, and Burgess, London.

*On Medical Education and Literature.*—Drs. Ridley, Hamilton; Michaud, Kamouraska, and Howard, Montreal.

*On Climatology.*—Drs. Playter, Toronto; Larocque, Montreal; Jennings, Halifax, and Lachapelle, Montreal.

The following gentlemen having been proposed and seconded were duly elected permanent members: Dr. Cowie, of Halifax; Dr. Kollmyer, of Montreal.

The following gentlemen were appointed delegates to the American Medical Association:—

Drs. Botsford, Trenholme and Hornibrooke, it being understood that if any other members wished to attend, the President could add them to the list.

Dr. BELL gave notice that he would move at the next meeting to change or amend the By-Laws so that officers of the Association might be elected for each of the provinces of the Dominion, existing or then existing, such as Manitoba, British Columbia, &c., &c.

The election of the officers for the current year was then proceeded with, and those recommended by the Nominating Committee were all unanimously elected.

Dr. OSLER called the attention of the meeting to the necessity of having the proceedings of the annual meetings published, and kindly offered to raise a subscription among the members for that purpose as the funds of the Association were so small that it could not be done in any other way than by subscription; this having been done, a good fund was at once subscribed for the purpose.

Drs. Dugdale and Lamarche were named to examine the Treasurer's books and papers.

On motion, the same sum as last year was voted to the General Secretary for his services.

Dr. Wright not being present at the meeting, his notice of motion to alter the By-Laws was laid over.

The GENERAL SECRETARY then read a letter from the Hamilton Medical and Surgical Society inviting the Association to hold its next annual meeting in the City of Hamilton, which invitation was cordially received, and on motion it was unanimously resolved, "That the meeting next year be held in the City of Hamilton."



Dr PARKER moved, seconded by Dr. DAVID, "That the By-law on the time of meeting be suspended so that the meeting at Hamilton be held on the second Wednesday of September, 1878," which motion was unanimously carried.

Dr. MULLIN thanked the Association for having accepted the invitation of the Hamilton Medical Association, and assured the members they would receive a hearty and cordial welcome.

The following gentlemen were named as the Committee of Arrangements, with power to add to their number: Drs. McDonald, Mullin, Malloch, Ridley, McElchan.

It was moved by Dr. PARKER, seconded by Dr. F. W. CAMPBELL, that the thanks of the Association be given "To the Syndicate of the Windsor Hotel for the admirable facilities afforded the Association for its place of meeting, and for the readiness with which its co-operation was afforded," which motion was cordially agreed to.

On motion, a vote of thanks was also passed to the Grand Trunk Railway Co., the Intercolonial and the Great Western R. R. Co.'s, and to the Richelieu and Ontario Navigation Company for their kindness in granting reduced rates of fare to members.

Drs. DUGDALE and LAMARCHE reported having carefully examined the Treasurer's books and papers, and found all correct, The amount received for the past year being \$221.33; amount expended, \$195.68, leaving a balance in hand of \$25.65.

Dr. REEVE, seconded by Dr. ZIMMERMAN, then moved a vote of thanks to the members of the profession in Montreal for their courtesy and hospitality to the members from other places, which motion was carried by acclamation.

Dr. BELL, seconded by Dr. OSLER, moved a vote of thanks to the Committee of Arrangements for their great labors and the perfect success of them, which was also carried by acclamation.

On the motion of Dr. ZIMMERMAN, seconded by Dr. MULLIN, the President vacated the chair, and Dr. Workman was requested to take it, when Dr. ZIMMERMAN moved, seconded by Dr. MULLIN, "That the sincere feelings of the Association be tendered Dr. Hingston for his affable and courteous bearing while presiding, which calls for our most sincere thanks."

A cordial vote of thanks was passed to Drs. Brodie, Kimball, Wing and Adams, for the honour they had done the Association in being present

throughout the Session. Dr. Brodie, of Detroit, returned thanks in a few well chosen words.

A cordial vote of thanks was also passed to Drs. Wilkins, Osler and Roddick for having displayed their valuable and interesting apparatus.

The Session then adjourned.

A. H. DAVID, M.D.,

*General Secretary Canada Medical Association.*

#### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL. AUGUST 4TH. 1877.

The President, Dr. Fenwick, occupied the chair.

Dr. BELL exhibited a patient of his who had fractured his thigh in the middle third about 12 weeks ago. The fracture had been treated with extension by weights, without any splints, simply with sand-bags to maintain the bone in position. After four weeks of such treatment a glue bandage was applied and the patient was allowed out of bed. The results had been most excellent, the limb was measured at the meeting and only  $\frac{1}{2}$  an inch shortening found.

Dr. F. W. CAMPBELL remarked that recently a resolution had been passed by the American Medical Association to the effect that no fracture of the thigh under any treatment united without some shortening. If such results as were got in this case can be attained by such simple means, then not only an important change but an improvement was made in surgical proceeding.

Dr. FENWICK quoted the testimony of Frank Hamilton of New York, that shortening to a greater or less extent always followed a fracture of the shaft of the fanner. Dr. Bell had tried the treatment which he described after a suggestion from Dr. Balch of Albany, a graduate of McGill, communicated by himself to Dr. Bell.

Dr. PROUDFOOT remarked that when he was House Surgeon of the City Hospital, Boston, six years ago, fractures of the thigh had been treated by extension with co-aptation splints merely.

Dr. FINNIE then read a paper on "Sulphur and Sulphurous Acid in the treatment of Diphtheria." It was generally believed now that the diphtheritic membrane was fungoid in character. It had occurred to him that anything which killed this fungoid would arrest the disease—sulphur was such a remedy. The present epidemic had prevailed from November of 1876 to the present time. Till January, he had been using tr. ferri. mur. and acid carbolio locally, and quinine and iron inter-

nally, with nourishing diet and stimulants when indicated, with little success. In January he began using the sulphur treatment. The treatment consisted in burning sulphur in the room for one or two minutes every two hours, giving sulphur grs. x. every two hours internally, and applying sulphurous acid locally. He cited a very severe and hopeless case which he had been treating in the old method; he began the sulphur treatment, and in 16 hours there was marked improvement and the patient recovered. The sulphur sometimes produced a relaxed state of the bowels in from 12 to 24 hours when it was necessary to lessen the dose. He had at that time treated 16 cases by that method, 11 under 10 years of age, 3 from 12 to 15 years and the rest adults, and since January he had treated two more cases in the same way, without a fatal case, and among them some had been very severe. He was satisfied of the great superiority of this treatment above all others, and strongly urged his confrères to give it a trial.

Dr. REDDY did not endorse all that Dr. Finnie said. He had tried the sulphur treatment, but combined it with the use of ammonia and iron internally.

Dr. F. W. CAMPBELL asked what was the effect on the membrane? He had seen the membrane reproduced after peeling off, and the symptoms reappear. There was a great difference in the severity of cases, a great many cases of inflammation of the tonsils with exudation of lymph were mistaken for diphtheria. In true diphtheria the membrane was dark brown and leathery, and there was enlargement of the submaxillary glands.

Dr. CLINE gave the statistics of the results of the treatment of diphtheria in the Montreal General Hospital. Out of twenty-seven cases there has been eight deaths, giving a mortality of 29 per cent. These cases had been treated on the old plan, ammonia and iron and sometimes chloral of potash internally, and locally disinfectant gargles and washes of carbolic acid, etc., with the exception of three or four cases which had been treated by the sulphur method. The ages of the fatal cases were two, 2 years, two, 3 years and the rest 1, 10, 6, and 24.

Dr. ROSS remarked that all the cases treated in the hospital were of a severe type, mild cases were not generally sent to hospital. It was necessary to have some idea of the severity of the cases reported in order to form any opinion as to the result of different modes of treatment. He asked if any local application of heat or cold had been used. He had lately been using ice internally and externally, and preferred

it to heat. It appeared to check the swelling of the glands.

Dr. OSLER at the Boston Medical Club had heard a paper read on the treatment of diphtheria. A great number of specifics had been advocated by different men, all of whom had reported a large number of cases attended with extraordinary success under their special mode of treatment. One man had reported 100 cases without a death.

Dr. FENWICK did not think that all cases of true diphtheria were attended with enlargement of the glands. Had seen very severe cases without such enlargement. Admitted that it was present in the majority of severe cases. The membrane was leathery, greyish, and about  $\frac{1}{8}$  inch thick.

Dr. FINNIE admitted the difficulty sometimes of distinguishing tonsillitis from diphtheria, yet was confident that none of his cases were cases of tonsillitis. Cited one case in which he was enabled to disprove diphtheria by the presence of a diphtheritic membrane on an abraded surface on the ear. He had used ice, but given it up on account of the discomfort its use generally produced. The local disease was not always proportionate to the severity of the general symptoms. The epidemic had been of a severe type, and out of 38 cases which he had some were very severe. Had great confidence in the sulphur treatment.

A vote of thanks to Dr. Finnie was moved by Dr. REDDY and seconded by Dr. CAMPBELL.

Dr. FENWICK made a proposition for the entertainment by the Medico-Chirurgical Society of the members of the Canada Medical Association, which was to meet in Montreal next month. It was decided to postpone the consideration of the proposition till next meeting.

August 31st, 1877.

The President, Dr. Fenwick, in the chair.

Dr. CLINE read a paper on an endemic of typhus fever in Montreal. It was a report of eleven cases of fever sent to the Montreal General Hospital from the Protestant House of Refuge last winter, in the beginning of the present year. The first cases were looked upon as typhoid, presenting anomalous symptoms, particularly in the eruption, as typhus is not a fever of this country. Some of these cases which proved fatal were found at the autopsies not to be typhoid. The undoubted character of another case, a full report of which was given, recalled to mind the previous cases, and led to further inquiries as to their origin. The cases were traced to an old woman who entered the

House of Refuge ill with fever. Beyond this case, no trace could be found. The condition of the night refuge in the Protestant House of Refuge last winter was described. The place was in a basement wanting ventilation and light, and so crowded that each person had 88 cubic feet of space. These were the conditions to propagate if not originate typhus fever.

Dr. H. HOWARD mentioned a case of an insane man who had been sent to the asylum at Longue Point from the House of Refuge, who died of typhus fever. The picture of typhus represented in the case described by the reader of the paper was exactly that of the cases which he had seen in Ireland. He remarked that the fact, that cases of fever in mud hovels in Ireland that lay in the damp ground recovered, while cases in rich dwellings proved fatal had suggested the use of the wet sheet, and also of the treatment in tents.

Dr. F. W. CAMPBELL remarked that in 1860-61 he had seen many cases of typhus in Dublin and Glasgow. Stated that sporadic cases had occurred in Montreal before this endemic. In 1867 he with Dr. Reddy had seen a genuine case of maculated typhus on the corner of St. George and Craig Streets which terminated fatally. Montreal was to be congratulated as having escaped an epidemic of typhus last winter.

Dr. ROSS believed that such isolated cases had not occurred since the epidemic of ship fever in '47 and '48. He could not accept Dr. Campbell's diagnosis of his case as correct without a *post mortem* examination. He and Dr. Girdwood were appointed a committee by the Medical Board of the General Hospital to enquire into the origin of these cases, and had failed to trace it beyond Jane Bennett. Work had been going on at the outlet of the Lachine Canal where the victims of the ship fever in '47 and '48 had been buried, and it had been suggested that this place was the origin of the infection. He thought that this was improbable from the length of time that had elapsed. He thought that the theory of origination *de novo* was more plausible.

Dr. KENNEDY.—As to the treatment by large doses of quinine. Was it used in all the cases? Was it beneficial? In the case reported, a temperature chart of which was shown, it did not appear to have had the effect of lowering the temperature.

Dr. H. HOWARD.—Dr. Jacob, in the *Dublin Medical Journal* 25 years ago, reported an instance in which a graveyard in which typhus fever cases had been buried 50 years before was disturbed and typhus fever broke out.

Dr. FULLER thought it remarkable that the men working at the Canal works were not infected.

Dr. ROSS replied that it had been supposed that some of the workmen might have been infected and typhus not diagnosed, and thus the woman Jane Bennett, perhaps, exposed to it, had caught the fever and brought it to the House of Refuge.

Dr. FENWICK remarked that John Sinnett, the case reported by Dr. Cline, had been working on the canal. He cited an instance of an outbreak of small-pox in the Indian Village of Lorette after the disturbance of a graveyard in which cases of small-pox had been buried 100 years before. He thought the occurrence of such instances was an argument for consideration.

Dr. TRENHOLME objected to Dr. Cline saying that typhus fever never occurred in Montreal unless imported. As it must have originated at some time, why not originate *de novo* here if certain conditions existed?

Dr. KOLLMYER said that he remembered an epidemic in 1852, when several students and medical men contracted the disease.

Dr. FENWICK said that isolated cases had occurred for a few years after the epidemic of 1847 and '48.

Dr. McCONNELL, visiting physician of the House of Refuge, said that Jane Bennett had come into that institution ill with the fever. In the cases which he had sent to the hospital, the high temperatures, nervous symptoms, and absence of abdominal symptoms had led him to suspect typhus fever.

Dr. NELSON remarked that the planks of broken up coffins from the excavations of the canal were carried off by women and children for firewood, protests against which had been frequently in the newspapers at the time.

Dr. CLINE replied to Dr. Kennedy's question with regard to the quinine treatment that it had been used in all the cases, that it always effected a temporary reduction of temperature and reminded him of a note in his report of a fall of the temperature from  $106\frac{1}{2}^{\circ}$  nearly  $4^{\circ}$  after 40 grains of quinine in two doses within one hour. In reply to Dr. Trenholme, said that he would adhere to the statement that the fever must have been imported, even as far back as 1847, until it was proved that it could originate *de novo*.

A vote of thanks to the reader of this paper was moved by Dr. TRENHOLME, seconded by Dr. H. HOWARD.

Dr. F. W. CAMPBELL made allusion to an article recently in the *British Medical Journal* on whooping cough, in which was remarked that an ulcer under the tongue on the frænum was almost invariably pre-

sent and was diagnostic. Since reading this he had observed it in many cases. Dr. Fuller had seen a case with him.

Dr. FULLER thought the cause of it was friction of the frænum on the teeth during spasms.

Dr. ROSS narrated an interesting case of diphtheria which occurred in his practice. The lady had been confined three months ago, and nine days after confinement complained of pain in vulva with a disagreeable discharge, and great swelling of the parts. On examination he found diphtheria. The case was very severe, there was great constitutional depression following it, and paralysis in one leg preceded by numbness in both legs and both hands, and albuminuria. There had been no diphtheria in the house or neighbourhood.

Dr. Fuller related some circumstances connected with a case which Dr. Ross had reported a few weeks ago to the Society, the case of a man on whom he had operated for fistula in ano and had sent to hospital because the wound became diphtheritic. Dr. Ross had said that he did not think it was diphtheritic. The man after being operated on went to the house of a neighbour where there was a child dead from diphtheria. The wound became diphtheritic, and a child of the patient's contracted pharyngeal diphtheria and died.

Dr. Ross said that he had said that he did not think it was diphtheritic, but had changed his opinion since.

Dr. Fuller also stated that he had used the same director which he had used in this case shortly afterwards in another surgical case, and in two or three days the wound became diphtheritic. Another case was that of a wounded foot in a child which became diphtheritic after its mother returned from laying out the body of a friend's child that had died of diphtheria.

Dr. FENWICK had seen external diphtheria frequently. Several times after tracheotomy for laryngeal diphtheria the wound took on the same action. He had had a case of pharyngeal diphtheria in a woman in which on the fifth or sixth day of the attack the vulva and urethra became diphtheritic. She had a retention of urine, and he had to remove the membrane in order to introduce a catheter.

J. D. CLINE, B.A., M.D.,

*Secretary.*

*To the Editor of the Canada Medical Record.*

MANCHESTER, August 10th, 1877.

DEAR MR. EDITOR,—The fifty-fifth session of the British Medical Association was brought to a close this afternoon. This is admitted on all hands

to have been one of the largest and most successful meetings yet held by the Association. The number of members who registered was upwards of a thousand, and of non-members something over one hundred. The arrangements made by the Manchester men for the accommodation of their visitors were as near perfection as can well be imagined. There were two reception rooms provided, one at the Concert Hall in the heart of the city, and one at Owen's College, about a mile away, where also the sectional meetings were held. In these rooms clerks attended regularly to answer inquiries, and assist in referring applicants to the proper authority. Reading and writing rooms were also provided for the use of members, and supplied with the daily papers, guide books, and writing materials. Post, telegraph, and cab offices were attached to the reception rooms, and arrangements were made for the care of parcels, letters, &c. A spacious refreshment room was erected behind the main building of Owen's College, where luncheon was supplied daily from one to three, at a fixed charge of half a crown. In the various lecture rooms of the Medical School were exhibited pathological preparations, physiological apparatus, microscopes, surgical instruments, new drugs, new articles of diet, photographs, drawings, charts, and a host of appliances having a greater or less professional bearing.

The first day (Tuesday) of the meeting was taken up with the addresses of the outgoing president and the President-Elect, and the Annual Report of the Council. The last President, Dr. De Bartholomé, of Sheffield, makes an excellent chairman, and seems to have had the universal esteem of the Association. He has the happy faculty, also, of keeping his audience in good humour at the same time that he commands their respect. He is a short man, inclined to be corpulent, with a large head, a dark piercing eye, and determined look, a man that the great Napoleon would have chosen to command. His successor, Dr. Eason Wilkinson, of Manchester, is his very counterpart, a jolly, easy-going, corpulent old Englishman, one who would rather run than fight any day. He appears, however, to be highly respected by the profession generally, and as a physician holds first rank in his own city. His address, which, no doubt, will be published in the journal of the Association, had reference almost entirely to local matters, and would have little interest for the majority of his hearers. I believe it is an understood thing that the President shall encroach as little as possible in his address on the work delegated to the Orators and several Sectional

Presidents, so that he must of necessity confine his remarks to a rather contracted area. It was the general opinion that, on the whole, Dr. Wilkinson acquitted himself well under the circumstances.

By eleven o'clock on Wednesday forenoon the spacious Chemistry Lecture Room of the College was crowded in every part by members anxious to hear what "that clever little fellow Roberts," as he was generally styled, would have to say in his address in Medicine. A treat was expected, and I am sure no one was disappointed, excepting it be the *de novo* theorists, who, of course, received no comfort from the address, but on the contrary carried away some very hard nuts to crack. William Roberts, M.D., F.R.S., Professor of Clinical Medicine, Owen's College, and Physician to the Manchester Royal Infirmary, is best known to the profession as the author of an excellent treatise on Renal Diseases. In his general appearance there is nothing remarkable, and in his manner he is quiet and unpretending. He has a very large consulting practice in Manchester, and so high are his services rated, and so widely has his reputation spread, that he not unfrequently visits professionally the great metropolis. What can exceed the feeling of triumph and self-satisfaction that must possess the mind of the provincial physician or surgeon, when speeding to London to assist the Jenners and Pagets out of their difficulties? Sir William Jenner, in moving the vote of thanks to Dr. Roberts for his able address, spoke of him with pride as an old disciple of his own, and chose to instance this as an illustration of the pupil outscholaring the master. This was probably the greatest compliment that could be paid to any man of our day, and no doubt Roberts feels that in receiving this he has been amply repaid for all the hard work he has evidently done.

The addresses in Surgery by Mr. Spencer Wells yesterday and in Obstetrics by Dr. Barnes to-day were also well attended. These will be fully reported in the *British Medical Journal*, and in fact all the leading English periodicals, so that further comment is unnecessary. They were both able in their way, but not to be compared as intellectual efforts with that of Roberts.

Last evening the annual dinner of the Association was held in the hall of the Assize Court, the tickets being limited to four hundred. On the right of the President sat the Bishop of Manchester, and on his left the Mayor, Abel Heywood, Esq. The room was handsomely decorated with flags and festoons of evergreens and flowers, while two military bands, stationed at either end of the room, played alternately during

the dinner. Altogether it was a magnificent display. Many of the speeches were excellent. The Bishop certainly bore of the palm among the non-medicals. He is a vigorous looking man with a very fine presence and a powerful voice, so that he could be heard with the greatest distinctness throughout the length and breadth of the hall, which unfortunately was not the case with the great majority of the speakers. Dr. Matthew Duncan of Edinburgh proposed the toast to the orators of the Association, and Sir W. Jenner responded, both in able speeches. Gairdner of Glasgow, gave the House of Commons and the members for Manchester. Mr. Birley, M.P., and Mr. Charley, M.P., responded. They agreed that the Government had not paid that attention to sanitary matters which had been promised at the polls, and one of them was constrained to apologize for having aided with the anti-vivisectionists.

The sectional meetings have all been well attended. It would be absurd even to attempt to enumerate the various papers that were read or criticise the discussions that took place. On Wednesday, Professor Chareot of Paris gave a demonstration on microscopical preparations, illustrating alterations in the osseous system in locomotor ataxy, lesions of the spinal cord in progressive muscular atrophy and infantile paralysis, preparations relating to the different forms of cirrhosis of the liver, and others showing the tubercular nature of acute lobar, or so-called caseous broncho-pneumonia. These elicited considerable interest in the Medical section.

In the Psychological section I listened yesterday to a discussion on the treatment of habitual drunkards, the outcome of which were the following resolutions, which I think you might, as a journalist, take more extended notice of, as the matter, you must admit, is a most vital one, and does not receive that attention from our profession which it merits:—

"That it is the opinion of the Psychological Section of the British Medical Association that legislative action is imperatively necessary for the treatment of habitual drunkards, and that this object would be best effected by the establishment of distinct institutions for their treatment.

"That it is the opinion of this meeting that the establishment of Reformatory Institutions for the confinement of drunken offenders during lengthened periods ought to be urged upon the Government."

The subject of Hospital Out-door Relief was brought up in the Public Health Section, and the following proposition adopted:—

"That it be recommended to the general meeting



that a committee be appointed with full authority to procure such changes in the administration of Out-patient Relief at Hospitals as they may find necessary, and that the working of the present system of Provident Dispensaries in Manchester be carefully investigated and reported upon."

The various manufactories, warehouses, and places in and about Manchester have been thrown open for inspection to members attending the Association. The staff of the Royal Infirmary, St. Mary's Hospital, Children's Hospital, &c., have attended daily from 9 to 11 a. m. to receive visitors, and point out any cases of interest in the wards. A number of excursions have been arranged for to-morrow. For instance the High Sheriff of Cheshire has kindly offered to entertain at his seat, Henbury Park, any members who may desire to visit Macclesfield; the medical

en of Lancaster will be glad to entertain fifty members of the Association, and show them over the places of interest in that famous old town; the proprietor of the Northwich Salt Mines has offered to receive thirty-five members to luncheon, and afterwards accompany them through his mine, which will be illuminated for the occasion, and so on. Altogether the Committee of Arrangements deserve the greatest praise for the manner in which they have gone their part.

Yours truly,

T. G. R.

## Progress of Medical Science.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC OF THOMAS M. MARKOE, M.D., PROFESSOR OF SURGERY, MAY 28TH, 1877.

### INGROWING TOE NAIL (So-called).

What is commonly denominated ingrowing toe nail, is in reality, nothing of the kind. In these cases you will find that the nail is all right. What then is the matter? The young woman now before you presents a very useful case, because it affords an example of an affection which is so common; and I take more interest in explaining cases of this kind than in the most elaborate and difficult operation, because you are liable to meet them every day in your practice. This matter of so-called ingrowing toe nail, I am sorry to say is, as a rule, entirely misunderstood, and improperly treated. The nail grows into the matrix, which is simply an involution of the skin, and a continuation of periosteum; and a portion of the nail lying in the groove of the matrix is smooth and rounded, and terminates in layers of epidermis. Through these layers a part of the nutrition of the nail goes on.

Here is an instance in which the tissues have become swollen and highly inflamed, and protrude over the nail. What is the explanation of this state of affairs? A tight boot has been worn, which presses the matrix forcibly against the nail. This occasions tenderness, and in order to relieve it, the edge of the nail is cut. This procedure results in the formation of granulations, and now the nail begins to plunge right into these granulations. Then the scissors are inserted, notwithstanding the severe pain thus occasioned, and more of the nail cut away. A fatal mistake. The surface becomes ulcerated and granulating, because, instead of the normal bulbous extremity of the nail, you now have a sharp, ragged edge pressing into the inflamed tissues. It is rough, harsh and irritating, instead of being smooth and rounded. If you have ever compared the beautiful and symmetrical sting of a bee with the rough and uneven point of even the finest cambric needle, under the microscope, you will understand exactly the difference to which I refer. The needle seems as clumsy as a crowbar.

Now as to the treatment. Our friend here must wear a loose shoe, in the first place. This is a *sine qua non*. Then the maltreated nail must be allowed to grow and regain its proper shape. While this is going on she will suffer considerable pain, but this will be her penance for having done wrong. By the end of six months the nail will probably have regained its normal outline. If much inflammatory action should continue while this is going on a slippery elm poultice may be applied from time to time. When the granulations become exuberant, a little pinch of dried alum will be found to be very effective in reducing them. Some persons suffering from this affection find great relief in the daily use of alum. The chances are, however, that our patient will become dissatisfied in waiting so long for a cure to result, and that she will once more resort to the fatal scissors, but we can at least give her fair warning of the long course of suffering which by so doing she will bring upon herself.

### TREATMENT OF RINGWORM.

Dr. Robert J. Lee, Senior Assistant Physician to the Hospital for Sick Children, Great Ormond Street, London, in *British Medical Journal* says:

"There are numerous agents which seem to have more or less active influence in the treatment of ringworm; some being advocated by some practitioners as superior to others, while these again have their own supporters. The spores of the trichophyton appear to resemble the microspores lately examined by Prof. Tyndall in their obstinate resistance to destruction; and the successful treatment of cases of tinea tonsurans clearly depends on determining whether it is possible to destroy these spores, or whe-

ther, by preventing their germination for a certain period, the disease practically cures itself. The observation of some troublesome cases of ringworm which had been under various kinds of treatment without much benefit, suggested a plan of treatment which excluded the possibility of destroying the trichophyton spores, and only had for its object the arrest of proliferation of the germs. The question of the destruction of microspores is one which perhaps does not present itself as quite a different question from the prevention of their development. An example will illustrate what is meant. If we take a solution containing bacteria, such, for instance, as that in which bladders are prepared for museum purposes, the odor of which is singularly powerful, and add to it a certain quantity of carbolic acid solution of the strength of 1 in 40, we shall find that the active living organisms which exist in the former will be instantly destroyed and the odor removed. If we do the same thing with a solution of salicylic acid of full strength (water absorbs only about 1 in 400) the organisms are not destroyed and the odor is not removed; that is to say, salicylic acid will not destroy well-developed bacteria. But salicylic acid will prevent them from developing, as is proved by the fact that we may preserve animal or vegetable matter from decomposition by treating it with solution of the acid. We thus see the importance of distinguishing between agents which destroy bacteria and microspores, and those which simply prevent their development; and there is no doubt that those who have been studying this most interesting subject by clinical, microscopical, or physical methods are well aware of the importance of ascertaining the conditions which favor or arrest the development of different species of germs; clearly a stage in the inquiry beyond that of the extent to which the germs may be destroyed by various agents.

"As it is well known that some of the remedies used for ringworm are less liable to produce inflammation of the skin than others, it is most desirable to give a preference to the former, the production of inflammatory changes seeming rather to retard than promote the action of a remedy. On this principle I have, during the last twelve months, used carbolic acid, the most certain agent for the prevention of the development as well as for the destruction of microspores, with decidedly better results than were observed when iodine, tincture of the sesquichloride of iron, or any other agents had been employed, including Goa powder, which has lately been recommended as superior to most others. There is one important point which must be attended to under any circumstances; and this is, the necessity of much more frequent application of any remedy than is usually considered requisite, for the reason that most species of microspores require only a few hours to advance

from one stage of development to another, and that, in order to prevent any increase in the number of the spores, though we may not be able to destroy them, it is absolutely necessary to apply the remedy at intervals of not less than six hours. The best preparation for this purpose is a combination of sulphur and olive-oil in equal parts, to which carbolic acid in the proportion of two grains to the drachm is added. To prevent the contact of the fingers of the person who applies it, and who is liable, without caution, to take hold of a child by the neck or shoulders, and thus produce the disease on other parts, a small sponge or brush should be used. This must be done every four or six hours, the head being washed with Castile soap and warm water night and morning before the application of the carbolized oil. If a stronger solution of the acid be used, as, for instance, in the proportion of 1 to 10, it will be found that a certain amount of inflammation is produced, and the frequent application of such a mixture cannot long be pursued. After making various experiments of this kind, I have found the preparation given above most satisfactory, and believe that the treatment of ringworm with carbolized sulphur oil may be recommended as superior to any other in common use.

"As a matter of experiment, there is no doubt as to the fact that no agent with which we are acquainted is to be compared to carbolic acid for the destruction of organic life without destruction of organic matter, and that no agent is so useful in treating parasitic diseases of the skin, from the fact that in proportion to its destructive action on the organisms which produce them, it is the least injurious to the cutaneous issue.

"Attention to details is of such importance in the treatment of tinea tonsurans, that it is necessary to add to the above directions the remark that the hair should be cut close with scissors, and that the oil should be rubbed into the skin for a few minutes. The treatment should be continued for at least a fortnight after the disease has apparently been cured. Either of the following prescriptions may be used. The first has the advantage of not becoming thick or dry from evaporation, while the second is cleaner and cheaper:

"R Sulphuris precipitati..... } aa 5 j;  
Zinci oxidi ..... }  
Olei olivæ ..... fl. 3 j;  
Acidi carbolicæ ..... gr. xvj.

"R Sulphuris precipitati..... } aa 3 ij;  
Zinc oxidi..... }  
Glycerini..... } aa fl. 3 iij;  
Aquæ..... }  
Acidi carbolicæ..... gr. xvj."

# BARON MUNCHAUSEN, JR., ON NERVE-STRETCHING.

We copy the following from the July number of the Pacific Medical and Surgical Journal:

A correspondent of the Canada Medical Journal, writing from Edinburgh under the signature T. G. R., and giving an account of Lister's operations in the infirmary, describes a case of nerve-stretching for sciatica of five years' standing which had resisted all ordinary treatment, "such as the application of Corrigan's hammer, acupuncture, hypodermic injections, blistering, purging, etc." "The symptoms were mainly great pain, feeling of numbness and loss of power in the limb. In the operation the directions laid down by Nussbaum were carried out, viz., after exposing the nerve immediately below the gluteal fold, powerful traction was made on it, first from below, then from above, and lastly at right angles to the body—with such force in the latter direction as to raise the body of the patient off the table." The relief was instantaneous so that on the day following there was no pain, but considerable power in the limb. Think of a human being suspended in the air by the sciatic nerve, like a calf in the shambles by its hamstring! It beats the "drawing plaster" that we heard of when a student, which was so powerful as to draw a man to his bed up three flights of stairs.

## THE HYPOPHOSPHITES IN PHTHISIS.

In the *British Medical Journal*, Dr. J. C. Thorowgood gives the following illustrations of the use of the hypophosphites of soda and lime: In the year 1863 I first began to employ these salts, and since I have learned more exactly to understand the nature of pneumonic phthisis and catarrhal pneumonia, I have been able more clearly to recognize the cases in which the hypophosphites come in as valuable remedial agents. Contrasted with many other remedies, such as mineral acids, quinine, and steel, the hypophosphites appear to much advantage, and may certainly stand side by side with cod-liver oil in the anti-phthical powers. As to steel, I believe it often does more harm than good, and tends to promote the increase of temperature which may herald the development of true tuberculosis in the lung.

CASE 1.—James R. E. was an out-patient at the Victoria Park Hospital, May 9th, 1867. He was a pale, thin young man; had been ill, with more or less cough for the last five years. He dated his illness from a sudden spitting of blood. The left side of his chest was flattened with impaired percussion resonance and abundant crepitant *râles* in inspiration. The right side of the chest was resonant; expiration was prolonged. Cod liver oil always made him sick. On the previous day he brought up blood. He was ordered to take five grains of hypophosphite of soda in camphor-water three times daily. May 16th the medicine agreed well, and he felt much better. On May 23rd the cough was much bet-

ter. Pulse 104. There was a cooing sound with expiration in the right lung. The left side was dull at the upper part, and here a dry creaking was replacing the crepitant *râle*. He was ordered to take five grains of hypophosphite of lime in place of the soda salt. On May 30th he was much amended; there was very little sputum now. On June 13th he felt himself well, though respiration was not normal in the left lung. He could now take some cod liver oil, and, at his own desire, left to go to his home in Wales.

CASE 2.—Benjamin D., a laborer, aged about 35, from Acton, was seen on June 27th, 1867. He had had a bad cough since March, with frequent spitting of blood. Pulse 104, feeble. The bowels were inclined to diarrhoea. The tongue was clammy. His breath was very short. Both sides of the chest were somewhat flattened. The respiratory sound was generally weak. Crepitant *râles*, to a slight extent, were heard over the left upper third. The liver was enlarged and tender. Cod-liver oil, he said, "always ran through him." He was ordered to take five grains of hypophosphite of lime with ten minims of saccharated solution of lime in effusion of calumba three times daily. He took this till August 8th, when he was discharged, stating that he could now walk a long distance without fatigue; his cough also was "nothing worth speaking of." Dry, creaking noises could be heard still at the upper part of the left lung.

Dr. Thorowgood adds several other cases equally striking.

## EPILEPTIC ATTACKS PREVENTED BY THE HYPODERMIC INJECTION OF APOMORPHIA.

E. Vallender (*Berliner Klin. Wochens.*, April, 2, 1877, p. 185) has employed apomorphia in the following cases with favorable results. A young country girl, 20 years of age, was suddenly attacked by epilepsy, which soon became so severe that the invasions followed each other almost continuously, day and night, for weeks at a time. Sometimes ten to fifteen occurred in twenty-four hours. The aura which always preceded the attacks consisted in a feeling of heat in the gastric region, with considerable pain. The feeling spread to other portions of the body, the attack coming on after a few minutes, with cries, loss of consciousness, and clonic spasms. When the patient came under Dr. V.'s care a hypodermic injection of apomorphia solution (containing four milligrammes—one-sixteenth grain—of the alkaloid) was administered at the beginning of the aura, which checked the attack so far that simply syncope ensued. Subsequently two milligrammes only of apomorphia were injected, in order to avoid the production of vomiting. In a few weeks the number of the attacks was greatly diminished, as well as their severity. When the administration of the apomorphia was sus-

pended, however, the attacks recurred. Finally, after some months' treatment, the patient was discharged not having had an attack for eight weeks. Several other patients were treated by Dr. Vallender in a similar manner with equal success, and he feels great confidence in the efficacy of the remedy. The fact that the aura in the case mentioned began in the gastric region would seem to point to implication of the vagus, and would account, perhaps, for the especially good effect of apomorphia. In other cases, however, where the aura had its origin in other localities, apomorphia worked equally well. One thing is requisite in the use of this remedy, and that is prompt application when the aura is first felt. When for any reason the hypodermic injection cannot be promptly made, or when the aura comes too close to the attack to give time for the injection, of course this treatment cannot be expected to succeed.

#### TREATMENT OF EXCESSIVE SWEATING.

In a discussion on anhidrotics, before the College of Physicians of Ireland, Dr. Hayden stated these were medical agents capable of arresting or controlling morbid perspiration. Anhidrotics were most frequently demanded in the advanced stages of pulmonary phthisis—those, namely, of softening and excavation. If the perspiration occur during sleep and toward morning, it is most effectually controlled by five grains of Dover's powder, given once or twice in the course of the night. If the perspiration be due to excessive coughing, the inhalation of ten to twenty minims of chloroform, or a full dose of chlorodyne and liquor morphiæ (ten minims of each) is the best remedy. Tepid sponging of the face, neck, chest, and hands, with equal parts of toilet vinegar and water at bedtime, is useful and agreeable. Cold or tepid drinks and sucking ice are aids in checking perspiration. The night dress should be put on hot. Belladonna (extract, half a grain; or tincture, thirty minims, at bedtime) checks in some degree the night sweats of phthisis. Oxide of zinc in combination with Dover's powder seems inferior to the latter given alone. In one case, profuse and obstinate sweating in convalescence from enteric fever was checked by insisting on the patient leaving his bed and sitting up. For sweating of the hands, feet, and axillæ, in those otherwise healthy, frequent washing and sponging with "tan-yard liquor" (i. e., a strong, cold infusion of oak bark) is very efficacious. Perspiration may be checked directly by means of topical astringents or by cold, but these means are of only temporary efficacy, and induce active reaction of the sweat-glands. Inhibition of blood supply to these glands through the vaso-motor nerve-system, as exemplified in Bernard's experiments of galvanizing the sympathetic nerve of the submaxillary gland, constitutes the scientific plan of treating general hidrosis. The medicinal agents by which this may be accomplished are anhidrotics in the true sense of the word. It is a question of much

interest whether, following the clue afforded by Bernard, physicians may not find in electricity an agent still more potent than medicine in the treatment of hidrosis. It would seem that cold liquids introduced into the stomach, being rapidly absorbed, act as anhidrotics by cooling the blood, whilst external heat acts as a peripheral irritant of the vaso-motor centre, whence, by inhibition of the cutaneous vessels, the functional activity of the sweat-glands is restrained or suspended.

Dr. Finny had used dilute sulphuric acid and liquor ferri perchloridi in phthisical sweating; also three-grain doses of Dover's powder and sulphate of atropia (one-eightieth of a grain for a dose). He mixed half a grain of the sulphate with sugar of milk, and divided the mass into forty pills. He bore witness to the value of atropia in the treatment of local sweating, and referred to a case of bromo-hyperidrosis of the feet, reported by Dr. Grimshaw, (*Irish Hospital Gazette*, 1872, p. 52) as being cured by atropia. It had not, however, in his (Dr. Finny's) experience, checked the sweating in enteric fever.

Dr. MacSwiney had been taught to use the diluted mineral acids with bitter infusions, acetate of lead, and belladonna, as anhidrotics. Sponging the body with warm diluted vinegar was very efficacious. Having regard to the correlation of diarrhœa and perspiration in phthisis, he did not think it desirable to use energetic and continuous means of arresting diaphoresis in the third stage of the disease.

The chairman said that remedies like cod liver oil, which improved the condition of the system, often checked perspiration in a remarkable manner. Evening drinks should be forbidden, as far as possible. Cotton worn next the skin and tepid sponging were useful. A powerful nervine like strychnia would lessen perspiration; but such remedies lost their effect after a time.

#### PROTECTION AGAINST FLIES—FOR DOCTORS' HORSES.

R Linseed oil ..... ʒ xij;  
Carbolic-acid crystals.... ʒ ij;  
Glycerine ..... ʒ jss.

Dissolve the glycerine and add the oil. Apply daily to legs, mane, tail, face, neck, and flanks; and the flies are driven off, much to the delight of the horses. The above excellent formula was made for me by Dr. Barnum, the druggist, Fourth Street, and has proven most satisfactory. L. P. Y., JR.—*Louisville Med. News*.

#### THE HYGIENE OF PHTHISICAL PATIENTS.

The unlimited use of fresh air is by far the chief desideratum for a consumptive. This is a point the value of which has to be repeated continually to consumptives. If we could make a patient in the city breathe pure country air several hours every day; if, besides, we could put him under proper hygienic conditions, free

from mental cares, we could sometimes save valuable lives, or at least retard the progress of the disease. In speaking about night air, the contamination of the air by accumulation of carbonic acid in closed rooms is already mentioned. But an equally deadly enemy of the consumptive is the dust in its finest forms, which is always in a room, even if kept scrupulously clean with all the windows open. To convince ourselves of the great quantity of this finest dust, it is not sufficient to look at a ray of the sun shining into a room, but it is necessary to darken the room completely except a very small opening, and I doubt if many can be found who would approach the ray of light with their mouth open without disgust. The same experiment can be made with strong electric light. The time a patient is spending in a room is lost, and worst than lost. I mentioned here only dust as contaminating the air in a room; but there are a good many other injurious elements in our dwellings helping to deteriorate the air; as, for instance, the decrease of oxygen, the excrements of respiration (carbonic acid and aqueous vapor), the excrements of perspiration, the products of illumination, the formation of carbonic oxide (results of gaslights, stoves), accidental vapors (tobacco smoke, kitchen vapor, etc.), the warming into motion of the whole conglomerate—each enough to drive a consumptive out of doors, who is in earnest to do the best he can for his health.

*Exercise* is another essential for phthisical patients, especially as it assists to overcome the deficient expansion of the chest and to bring air into parts of the lungs which were more or less inactive. To achieve this end ordinary walking is not sufficient, but the patient must take deep inspirations, stop when his breath shortens, fully recover it, then go on until the breath shortens again, never allowing himself to become even partially "blown." In this connection, it may be permitted me to say a few words about the manner of breathing, which I extract from Niemeyer's *Atmiatry*, and to which too little attention is paid as yet. We pay much and often painful attention to our food-diet, but how many are there who observe a respiratory-diet, which is equally if not more important than the first. One of the reasons of this neglect is the secrecy with which respiration takes place. Many acts are necessary for nourishment—the procuring of food, its preparation, mastication, digestion; the excrements are disagreeable to our senses; nothing of all this with the respiration. We breathe unconsciously, and if the air becomes bad in consequence of accumulation of respiratory excrements, it does not become perceptible to our senses. We distinguish three modes of breathing: shoulder respiration, the most important; costal respiration, depending upon the elasticity of the ribs; abdominal respiration, the most extensive, as the

descent of the diaphragm sets about three fourths of the lung into activity. The apices are the least ventilated parts of the lungs, as the shoulder respiration requires a certain position of the body and a certain amount of labor—unlike abdominal respiration, which is possible in all positions. Besides a proper position some few more points interfere with full shoulder respiration: the scapula with its appendices, the extremities, rests like a roof on the top of the lung, and has to be raised by will in order to comply with the object in view. The apices have not those supplementary spaces at the side and the base of the lung suited to receive the inflated parts. Further, the bronchus of the upper lobe does not directly descend, as in the lower lobe, but runs upward in a curved direction and divides very early into a multitude of bronchial tubes, so that the inspiratory stream of air has to run around many curves and corners till it reaches its destination—the alveoli. The apices of the lung are, therefore, best adapted to serve as a reservoir of residual air, which stagnates and is seldom and imperfectly renewed—a fact which plays an important part in the etiology of the primary seat of the disease, which, as well known, is in the majority of cases the apices. Full breathing is as essential to the lungs as eating to the stomach, and we delight to see the new-born child exert it to the fullest extent during the act of crying. All nomadic tribes are naturally full breathers, while we are accustomed to a sitting life, and only occasionally, when bent over too long in one position, erect ourselves and take involuntarily a deep, full breath. Artificial positions assist in setting certain parts of the lung into activity, and ought to be recommended, after careful selection, to the patient. For the sake of illustration, examples of two positions may be mentioned: if we desire a patient to breathe more with one side, for instance, the left, lower the right shoulder, let the right arm hang down, and raise the left arm and breathe deep. To promote shoulder respiration let an attendant compress the false ribs of the patient, and have him cross his hands over his head and breathe deep.

*The use of cold water* in its different applications ought not to be neglected in the treatment of invalids, as the skin is inactive and prone to perspiration. Cultivation of the skin counteracts the disposition to catching cold, and cold and cold water applications act very favorably against an accompanying fever.

The relief of unpleasant or dangerous symptoms, especially careful observation of the functions of digestion and assimilation, are of course to be kept constantly in view.—*W. Gleitsmann, in N. O. Med. and Surg. Journal.*



## A NEW REMEDY FOR BURNS AND SCALDS.

There is no end to specifics for burns and scalds, but most of them prove to be at best mere palliatives. The latest one that we have seen, however, comes with an indorsement of a remarkable character. The discoverer gives a practical illustration of its efficacy by scalding himself severely before many witnesses, and trusting to the new remedy for relief. At a recent meeting of the Massachusetts Dental Society in Salem, Dr. S. F. Waters, of this city, stated that the application of bicarbonate of soda, which is the simple cooking soda, to be found in all households, or other alkalis in a neutral form, would cause instantaneous cessation of pain from the severest burns or scalds, and that in all cases of mere superficial burning the treatment would effect a cure in the course of a few hours. To demonstrate the truth of this assertion, the doctor dipped a sponge into boiling water and squeezed it over his right wrist, the water flowing almost completely around the arm, and nearly encircling it with a severe scald something like two inches in width. Not content with this, he dipped the sponge a second time, and pressed it closely on the under side of his wrist for thirty seconds. He then applied bicarbonate of soda to the scalded surface, and laid over it a wet cloth, and the intense pain was banished as if by magic. On the next day after this severe test, the scald, with the exception of the part purposely made most severe, was practically healed, only a slight discoloration of the skin showing where the scalding water had flowed—this, too, without a second application of the soda. The flesh on the under side of the wrist had been cooked down to the sweat-glands, and the scald was one which ordinarily would have caused an open and painful wound of long duration. The only treatment of this, however, after the first application of the soda, was to keep the part moist with a wet cloth, and no pain was experienced, and it was but a few days before this severe wound was seen to be rapidly healing.—*Boston Journal of Chemistry*, Aug., 1877.

## USEFUL PRESCRIPTIONS.

By J. LEWIS SMITH, M.D., Clinical Professor of Diseases of Children in Bellevue Hospital Medical College, etc., New York.

Several years ago, Dr. Horace Green, then having withdrawn from general practice and devoting his attention to the specialty with which his name was associated in this country and in Europe, contributed to one of the New York medical journals a series of papers bearing some such title as the above. To me, then embarking in the profession, these papers seemed very valuable, and I copied from them prescriptions which, more or less modified, I have continued to use with good results till the present time.

It has been said, that, if the diagnosis is clear, the physician, if he have the knowledge which

he should possess of the therapeutic effects and doses of the articles in the materia medica, knows at once what to prescribe; but, according to my experience, it requires years of practice to enable the physician to prescribe with the best selection and the best combination of medicines, in a large proportion of the cases which he is called upon to treat. Having these views, and thinking to aid the younger members of the profession, I am induced to send, for publication, the following prescriptions, all of which have been sufficiently employed, either in family practice or in the institutions of New York, with which I have an official connection, to enable me to recommend them with confidence in their efficiency.

*Indigestion.*—Indigestion, though often accompanied by an unpleasant sensation of dulness or weight in the epigastrium, by heart-burn, water-brash, eructations of gas, etc., commonly has no serious anatomical cause, and results from functional derangements which are easily rectified if the proper remedies are employed. But, from difficulties attending the examination of the stomach, the exact pathological state in most cases of indigestion not be readily ascertained; so that physicians are compelled to prescribe without that full and clear diagnosis, which they are able to make in most other diseases.

The following treatment has, in my practice, probably relieved nine-tenths of those cases of dyspepsia, which were not due to organic disease:

B. Bismuthi subcarbonatis... ʒij.

Pepsini (vel Lactopeptini)... ʒiiss. Misce.

Divide in crustulas, No. xij. Signe:—Take one wafer before each meal, and twenty drops of the following in wine or water after each meal:

B. Tincturæ nucis vomicæ,

Acidi muriatic (dilut.)... ʒj. Misce.

In cases attended by constipation and eructation of gas, the following will be found useful:

B. Pulveris carbon. ligni,

Magnes. calcinat..... ʒaa ʒj.

Pulveris rhei..... ʒij. ad ʒss. Misce.

S. Take half a teaspoonful to one teaspoonful in simple syrup or any convenient vehicle, three times daily. Of course, whatever the medicines employed, proper directions should be given in regard to the diet of dyspeptics.

*Constipation.*—In habitual constipation of the adult, in which the use of fruits and the most laxative articles of food often has little effect in producing evacuations, the following pill will be found very efficient, while its purgative effect is not severe, and is commonly without pain:

B. Ext. belladonnæ..... gr. iij.

Ext. nucis vomicæ..... gr. vj.

Podophyllin..... gr. vj—ix.

Ext. aloes..... gr. xvij. Misce.

Divide in pilulas No. xvij. S. Take one when required.

The habitual constipation of infants is a common and troublesome complaint. It can sometimes be remedied when a wet nurse is employed, by the change from one nurse to another, and often by giving a little oatmeal one or more times daily. It is better to employ enemata of water, or water with sweet oil and molasses for habitual use, than to employ even the mildest preparations of those purgative drugs which are in ordinary use, and which produce catharsis by their stimulating or irritating effect upon the surface of the intestines, since the irritation which they cause is apt to impair the function of the gastro-intestinal mucous membrane; or the intestines may become so accustomed to them, that it will be found necessary to increase the dose in order to obtain the desired result.

The treatment which I am at present employing for a decidedly strumous child, aged 4 years, in the New York Foundling Asylum, indicates the manner in which, in my opinion, the habitual constipation of young children can be best overcome. When I commenced attending in this institution in May of the present year, I was informed that this child, who had scrofulous inflammation of one of the joints, and a greatly enlarged and pendulous abdomen, from a lack of tonicity and action in the muscular fibres, seldom had a stool without the use of a cathartic or a clyster. The circumference of the body, measured over the umbilicus, was twenty-three inches, and the abdomen was soft and painless on pressure. The following prescription was ordered:

B. Syr. calcis lactophosphat...1 part.

Olei morrhuae.....2 parts. Misc.

S. Give two teaspoonfuls three times daily. Rub the entire abdominal surface three times daily with cod liver oil, making the inunction gently but firmly with the extended fingers.

From the day on which this treatment commenced the abdominal protuberance began to subside, and stools have occurred regularly without further aid. In the ordinary habitual constipation of young children, I think that the muscular coat of the intestines needs stimulating to produce more active peristaltic, and vermicular movements, and I know no safer and better way to produce this than by kneading and rubbing, just as we make the uterine fibres contract in parturient women. It insures more thorough manipulation if the nurse is directed to apply some kind of oil or other medicament.

Having on different occasions noticed a laxative effect from the syrup of the lactophosphate of lime and cod liver oil, either given in the proportion stated above, or half and half, employed to improve the general nutrition, in

the treatment of the diathetic diseases, I now usually order the two in a mixture, to be given three times daily in connection with the rubbing, for the habitual constipation of children. The syrup of the lactophosphate of lime is not officinal, unless recently, but is found in the shops, each drachm containing two grains of the salt. It is pleasant to the taste, being a little tart, from the presence of free lactic acid, and, I am informed also, of dilute muriatic acid, which is added to insure better preservation. If a more active laxative is occasionally required, I prefer the following:

B. Sodæ phosphatis.....3 j.

Syr. calcis lactophosphatis. 3 iiss. Misc.

Give one teaspoonful, more or less according to the age, as often as may be required. The two phosphatic salts, if properly prepared, dissolve without precipitation, and form a mixture, which is readily taken by the patient.

*Infantile Diarrhœa.*—The hot season is approaching, during which the diarrhœa of infants is the most common and fatal malady of the cities. It is very important, in order to its successful treatment, that its cause be removed so far as possible; for by the continued operation of the cause, the diarrhœa is obviously more stubborn and persistent. Therefore, proper directions should be given in reference to the hygienic management of the patients, and especially as concerns the diet.

The treatment of this disease by small doses of calomel, combined with Dover's powder, has been very generally and properly discarded in New York. The more intelligent physicians prescribe opium and bismuth, with or without pepsine or lactopeptine, and sometimes in combination with chalk. The following prescriptions have been largely and successfully employed in the New York Infant Asylum, and in private practice:

R. Tinct. opii..... gtt. xvj.

Bismuth. subnitrat..... 3 ij.

Syr. simplic..... 3 ss.

Mistur. cretæ ..... 3 iss. Misc.

Give one teaspoonful every three hours to a child of one year.

R. Tinct. opii... gtt. xvj.

Bismuth. subnitrat..... 3 ij.

Pepsini (vel Lactopeptini)..... 3 iss.

Syr. zingiberis,

Aq. menth peperit ..... aa 3 i.

To be administered in the same dose as the foregoing. In severe cases the dose may be given for a time every two or two and a half hours.

Vomiting is often a prominent symptom in this malady. It sometimes commences before the diarrhœa, and often continues after the latter ceases. It may be controlled by the above prescriptions, and often, also, by lime water given in an equal quantity of milk, to

which, double or treble as many drops of Bourbon whiskey or brandy are added as the infant is months old. A few drops of chloroform, in cold water, will also sometimes control the vomiting. Carbolic acid, given in doses of  $\frac{1}{16}$ th to  $\frac{1}{8}$  of a drop has been recommended by writers for the nausea, but I have not observed any decided benefit from its use in the majority of instances in which I have had an opportunity to witness its effects. But there is another remedy which I can recommend, which is seldom used for this purpose, and the dose of which is so small, that most physicians will probably think it inert, namely:  $\frac{1}{16}$  to  $\frac{1}{8}$  of a drop of tincture of ipecacuanha, given to the infant in a teaspoonful of cold water, every hour or second hour, till the nausea ceases.

The reports of its use in two of the institutions of New York have been favorable. A physician of New York, exact in his observations, and cautious in his statements, has informed me that he recently relieved vomiting in an adult, when other remedies had failed, by one drop doses of the same medicine.

The "summer complaint" of infants is, in most instances, an enterocolitis, the inflammatory lesions being especially marked in the descending colon, while the gastric mucous surface, even in those cases in which nausea is a prominent symptom, usually shows no anatomical change apparent to the naked eye. In certain cases, in which the diarrhœa is not sufficiently controlled by medicines administered by the mouth, injections of  $\frac{1}{16}$  to  $\frac{1}{8}$ th of a grain of nitrate of silver in each ounce of mucilage, will be found useful.

*Uses of Cinchona and Quinine.*—There are few articles in the materia medica which physicians would part with more reluctantly than quinine, and of late years its use has largely increased. It is not only given in more diseases than formerly, but in greater doses. It is now prescribed as an aperient, in many of those maladies in which veratrum viride and aconite were formerly employed, since, while in large doses it reduces the pulse and temperature, it does not depress like those agents. It is now commonly prescribed in this city (New York) in severe pneumonia, child-bed fever, etc., so that from twenty to forty or fifty grains are given, in twenty-four hours, in five to fifteen grain doses, taking the place of the depressing aperients formerly used, and apparently aiding materially in arresting the disease. This increased demand increases the price of the drug, so that the poor often feel the expense of it too burdensome, if the sickness be of considerable duration. If the price is still farther advanced quinine will be placed beyond the reach of many families, except in diseases of short duration. Therefore, it seems to me, the duty of physicians to prescribe other and cheaper medicines when they will answer nearly or quite

as well, reserving the quinine for graver cases, and cases in which no adequate substitute can be prescribed. In some of the New York hospitals and dispensaries sulphate of cinchonia is dispensed in place of quinine, being given in the same manner and in doses one third larger. It has been found an efficient substitute for quinine in the treatment of malarial diseases, neuralgias, etc.

Twenty years ago, when I was one of the physicians to the Northwestern Dispensary, the apothecary introduced a mixture, which the whole medical board prescribed, and which seemed to us preferable, in many cases, to quinine, while it was less unpleasant to the taste, and was comparatively inexpensive. Of late years I recognize the same medicine as a popular nostrum, having the name, "Indian cholagogue." It will be seen from its composition, and experience shows, that it is an efficient substitute for quinine, as a tonic and in the treatment of malarial and neuralgic diseases. By adding a teaspoonful of it to a certain number of teaspoonfuls of water, it can be readily administered to young children.

R. Quinise sulphat.....  $\frac{3}{4}$  ij.  
Pulv. cinchonæ.....  $\frac{3}{4}$  iv.  
Tinct. sanguinar. sat.....  $\frac{3}{4}$  iv.  
Syr. simplic.....  $\frac{3}{4}$  j.  
Strychniæ..... gr. iij.  
Acid sulphur. aromat...  $\frac{3}{4}$  ij.  
Spts. vini.....  $\frac{3}{4}$  ij.  
Aq. puræ.....  $\frac{3}{4}$  ij.  
Ol. gaulther.  
Ol. menth. piperit..... aa  $\frac{3}{4}$  j. Misce.

One difficulty in the employment of the sulphate of quinia and cinchonia, is their extreme bitterness. This property sometimes prevents the proper employment of these salts, especially for children. No vehicle with which I am acquainted, so well conceals their bitterness, without impairing their efficacy, as the following, which is prepared by one of the leading pharmaceutical firms of New York, who have given it the name elixir adjuvans. The sulphate, whether of quinia or cinchonia, is suspended in it, no acid being employed. I have obtained, indirectly from one of the firm, the formula for this elixir.

R. Cort. aurant.....  $\frac{3}{4}$  ij.  
Pulv. semin. corinad.,  
Pulv. semin. carui..... aa  $\frac{3}{4}$  j.  
Pulv. cort. pruni Virginian.  $\frac{3}{4}$  iv.  
Pulv. radidis glycyrrhiz....  $\frac{3}{4}$  vj.  
Menstrum:—Alcohol..... part j.  
Aqua..... parts iiss.  
Percolat..... five pints.  
Add:—Syr. simplic,  
Aqua..... aa O iiss.

Three grains of the sulphate or under, may be prescribed in each teaspoonful of this elixir, and five grains in each dessertspoonful.—*Virginia Medical Journal.*

## ALCOHOL IN INCIPIENT MENTAL DISEASE.

The current of medical opinion throughout the world is setting strongly against the use of alcohol either in health or in disease. It is coming to be generally admitted that the cases requiring it are rare and exceptional, and that the number of these is likely to be diminished rather than increased, with advancing knowledge and experience. Incipient mental disease is one of these exceptions, according to Dr. J. C. Bucknill, one of the highest living authorities on the treatment of insanity in all its varied forms. Alcohol has certainly been a prolific cause of insanity, and it is not impossible that it may be of some limited service, in the hands of the judicious physician, in the prevention of mental derangement. The following extracts from a recent lecture by Dr. Bucknill, before the Medico-Psychological Association, will interest even those whom they do not convince:—

"I may venture to indicate what I think to be a real aspect of drink in relation to insanity, namely, the casual relation between the occasional use of alcohol, and the prevention or postponement of mental disease.

"With men of such wide experience as my present audience, a few considerations will probably suffice to gain me many suffrages in favour of this novel and, I fear, startling proposition; but let us bear in mind many of the commoner moral and physical causes of insanity, the prevailing bodily conditions of the incipient disease, and the necessities of the treatment, and we must, I think, see and admit that this stimulant-narcotic, in such general use, must have a vast and varying influence upon the organisms of men, which is not likely to be invariably pernicious, and which may well be sometimes beneficial and conservative of the mental health.

"Consider the great part which grief and anxiety, worry and overstrain play in the production of insanity, the depressing effects of poverty and the failing struggle for existence, of misery in all its forms, and then consider to how great an extent the use of alcohol oftentimes tends to make the burden of life bearable, if not by stimulating the powers, at least by deadening the sensibilities of men; and I think you will agree with me that, by the occasional help of strong drink, a man may sometimes be able to weather that point of wretchedness upon which his sanity would otherwise have been wrecked. The observation of life forbids us to doubt that 'wine, that maketh glad the heart of man,' according to Holy Writ, doth sometimes blunt the keen edge of misery, so that the wretch is not 'cut to the brain,' like King Lear. Alcohol, in its physiological action, is *atriptic* retarding the disintegration of the tissues, especially of the nerve tissue; and, when the brain is wearing itself into madness alcohol, at the right time and in the right dose, does, without doubt, sometimes check the ebb-tide of reason. Perhaps, a few timely doses of opium might have the same or a better result, if the people of this country were in the habit of resorting to opium to dull their misery and assuage their pain; and in China, opium, although the source

of infinite mischief, is also, no doubt, a precious boon to the miserable who may use it aright, either by happy chance or wise direction.

"Alcohol, moreover, is not only a narcotic, which may 'knit up the raveled sleeve of care;' it is also, according to Anstie, Lauder Brunton, and all good authorities, a food, and as such it plays an important part in the therapeutics of insanity. I have myself no doubt that a moderate use of fermented drink is useful in the treatment of mental disease, not only that a cure, when possible, may be attained, *cito, certo, et jucundè*, but that, in incurable cases, the bodily health may be improved and the mental misery alleviated."—*Boston Journal of Chemistry*, Aug., 1877.

## TREATMENT OF HEADACHE.

A recent lecture by Professor A. Smith, of the Bellevue Hospital Medical College, San Francisco, contains some valuable suggestions on the treatment of various forms of that Protean malady, headache. He says:—

A headache, when due to nervous disturbance, such as occurs in hysterical or excitable subjects, if associated with plethora, often yields to a saline cathartic. The most agreeable is the solution of citrate of magnesia, and should be given on an empty stomach. In addition, it is well to give one of the bromides combined with valerian. The following prescription I frequently use:—

Sodi bromidi..... 3vj.

Elix. valer. amm..... 3iv. M.

Sig. 3i. every hour until relieved.

If such nervous headache be associated with anæmia, after relieving the immediate attack with the bromide and valerian prescription, give iron, and give it for weeks, until there is a decided improvement in the patient's condition. Always give the iron after meals. In these anæmic cases it is often advisable to stimulate the heart's action. For this purpose I have found the following useful:—

Amm. muriat..... ʒss.

Tinct. actææ racemos..... ʒij.

Aquæ..... ʒij. M.

Sig. 3ij. after meals in a wineglass of water.

It is important to attend to the general health of the patient. Remove all causes of excitement, encourage exercise in the open air; let the food be simple but nutritious; let the sleeping-room be large and well ventilated; in short, let the patient be surrounded by the best possible hygienic influences. These general remarks will apply to almost all forms of headache. I usually recognize two forms of sick-headache (so-called), the one neuralgic in character, as hemicrania and trifacial neuralgia, the other a dyspeptic headache. In the neuralgic variety the pain in the head precedes the nausea, while in the dyspeptic variety the pain in the head succeeds the dyspeptic symptoms. In the neuralgic, vomiting does not relieve the pain, while in the dyspeptic an emetic or laxative often removes the pain in the

head by removing the cause. In addition to the treatment given in a previous lecture for neuralgic headache, which often occurs at intervals of a few days, or a week or two, sometimes coming on at sunrise and disappearing at sunset, I have good results from the use of guarana, or *Paullinia sorbilis*, as it is sometimes called. I give it usually in powder, 15 grains every 15 minutes, until six doses have been taken. It is best given in a little sweetened water; and if six doses do not relieve, do not continue it; it will probably not relieve. It is well to give these powders in any headache (not malarial) of long standing and prone to return at certain intervals.

Dyspepsia is a frequent cause of headache.

If there is indigestible food in the stomach, and it has been there some time, give an emetic, as mustard and warm water, or sulphate zinc gr. xv., and remove it. If there is evidence of indigestible food in the alimentary canal beyond the stomach, give gr. xx. of rhubarb and magnesia each, and remove it from the bowels. If the headache be frontal, and the pain is located immediately over the eyes, give dilute nitro-muriatic acid in ten-drop doses, well diluted, after meals. If the pain is located about the roots of the hair, give an alkali before meals, as gr. xx. bicarbonate of soda or magnesia. The dyspeptic headache oftentimes is not confined to these regions, but spreads over the entire head. In such cases I combine an acid with an alkali, and add to these *nux vomica*, as in the following prescription:—

Sod. bicarb..... 3 iiss.  
Ae. nitro-mur. dil..... 3 ij.  
Tinct. nuc. vom..... 3 iss.  
Syr. aurant. cort..... 3 vj.  
Aqua, q. s. ad..... 3 vj. M.

Sig. 3 ss. after meals in a wineglass of water.

If there be gastric pain, a mild counter-irritant, as a mustard plaster to the epigastrium, will often relieve the pain in the head as well as the pain in the stomach. If flatulence be a troublesome symptom, give the following:—

Bismuth subcarb..... 3 iss.  
Tinct. nucis vom..... 3 iss.  
Tinc. card. co..... 3 iv.  
Spts. lav. comp. q. s. ad..... 3 iv. M.

Sig. 3 ij. before meals in a wineglass of water.

If there be constipation, the following pill may be given, one in the morning:—

Aloes pulv..... 3 ss.  
Ext. nuc. vom..... gr. v.  
Ext. belladonnæ..... gr. iv. M.  
Div. in pil. No. xv.

In some forms of headache associated with stomach indigestion I have found small doses often repeated of tinct. *nux vomica* effectual. I give a single drop every fifteen minutes, and continue this two or three hours if necessary. In other cases, where the headache comes on soon after a meal and seems to depend on delaying stomach digestion, large doses of pepsin are effectual. Give a half drachm

saccharated pepsin in a wineglass of sherry wine, t. i. d., and let it be taken during meals.

Cerebral congestion as a cause of headache may be divided into two varieties, active and passive. These claim almost directly opposite plans of treatment. In the active variety the patient should be kept in a darkened room, perfectly quiet, cold and evaporating lotions applied to the head. A saline cathartic may be given, and the following prescription:—

Sodii bromidi..... 3 iiss.  
Fl. ext. ergot..... 3 iiss.  
Syr. ziuzib..... 3 ss.  
Aq. aurant. flor. q. s. ad..... 3 iv. M.  
Sig. 3 ss. q. 2 h.

If the skin be hot and dry, and the pulse full and rapid, give Fleming's tinct. aconit. rad. gtt. ii. q. 2 h, until the heart's action is sensibly diminished. Sometimes a hot mustard foot-bath will give relief.

The passive congestive variety demands a different mode of treatment. In many cases this variety is found associated with cardiac disease, and most frequently where there is predominant dilation. Hypertrophy gives rise to the active variety. Improve the condition of the blood by the use of iron, quinine, bitter tonics, alcoholic stimulants, good food, and stimulate the heart's action by the use of the following:—

Tinct. digitalis..... 3 iij.  
Spts. annu. aromat..... 3 vj.  
Spts. lavand. co..... 3 iij.  
Syr. simp. q. s. ad..... 3 iij. M.  
Sig. 3 i. q. 4. h.

—*Boston Journal of Chemistry, Aug., 1877.*

#### SANTONIN.

In a short article on the use of this drug (*Med. Times and Gaz.*, July 7, 1877) Mr. E. Marlett Boddy says there is no doubt that santonin is, for many reasons, by far the most efficient anthelmintic which can possibly be administered to children, and its combination with calomel he has found to be most advantageous in every respect. Santonin, like every other therapeutic agent, requires care in its administration; and if it is allowed to remain in the system it acts deleteriously, like certain cumulative medicines. This pernicious after-action one of course seeks as much as possible to obviate, and the only way to do so as regards santonin is to combine it with some purgative, such as calomel, which carries it off.

According to Falek of Marburg, if santonin is allowed to remain in the system we get a substance called xanthopsin, into which santonin is supposed to be transformed under certain circumstances which at present are not well ascertained. This xanthopsin is excreted by the urine, giving it a remarkable yellow colour, causing a similitude to that secretion passed in jaundice, and its presence there is easily detected by caustic alkalies, which redden the urine. No doubt it is this xanthopsin which gives rise to those dangerous symptoms that



have been so largely dilated on of late, and which many attribute to santonin only, forgetting or ignoring the presence of xanthopsin; and this mischievous action Mr. Boddy has found from experience to be entirely counteracted, or rather prevented by administering calomel at the same time.

He says: I generally administer santonin combined with calomel, or I give it preceded and then followed by that drug; but one plan is as good as the other. The results of so giving this anthelmintic in either of these two modes have been most happy, and I have very seldom found it necessary to repeat the dose, for such treatment is thorough and consequently precludes the necessity of repetition.

I myself have never had a case where convulsions or retention of urine have originated from santonin; in fact, I have never seen any untoward symptom resulting from it in any way whatever, which I attribute to my combining it with calomel, or preceding and following it up by that purgative.

My experience has convinced me that nothing of a deleterious tendency can possibly accrue from santonin if it is combined with calomel, for by so doing we do not allow sufficient time to elapse for the xanthopsin to act on the system, for when the santonin has done its work the calomel removes it. The latter drug is a more searching purgative than castor oil; being likewise a cholagogue, it causes a greater secretion of bile, which, as my readers know, is the natural purgative. Giving the santonin in one of these two methods afore-mentioned will entirely prevent all dangerous symptoms arising; there will be no convulsions and no retention of urine; nor will that secretion appear like that found in jaundice, for this one simple reason: the santonin, when it has done its work, is eliminated from the system by the calomel, and consequently the poisoned xanthopsin has not sufficient time to form. Perhaps this substance is the cause of patients seeing objects either yellow or green in colour.

#### THE ARREST OF PHTHISIS BY SPECIAL EXERCISE.

In order to meet the request of various medical men, in different parts of the country, to describe the mechanism of my plan of treatment, I would say that the mechanical treatment for clearing the lungs and the re-establishment of vesicular respiration consists of three different exercises, which follow each other as the strength of the patient permits. 1. The patient is placed in an erect position, with both arms extended, horizontally, on the level with the shoulders. In this position he advances toward a corner of a room, when the hands are placed flat upon the wall, the body is moved slowly forward into the angle, the hands gliding upon the wall. The arms must not be bent, and the spine must be held erect. The actual contact of the patient's face with the corner is hardly ever accomplished on the first attempt; however, he is urged to get as close as possible. He is then told to bend his elbow-joints, and to pull himself slowly back again by the power

of the pectoral muscles; the hands to remain on the spot where they were. This exercise stretches the chest very much across the clavicles. Patients are told to do this from six to twelve times per day. Muscular pain across the chest is the next consequence. In about a month the patient should have gained sufficient strength to begin the exercise No. 2. This consists in the same movement, with the body in a horizontal position. The patient lets the body slowly sink toward the floor, as far as his strength permits. The hands rest upon two chairs, placed at a distance of four to five feet, and secured. The whole weight of the body rests upon his two hands and his toes. He having approached the floor as near as he can, is then told to pull himself up again as slowly as he sank. This is a very difficult exercise, and makes the muscles tremble; involuntary deep inspirations follow it immediately. In about three to five months the third and last exercise is commenced. The patient is placed in the middle of a room in an erect position. One arm is lifted at the time, as in exercise No. 1. This horizontally stretched-out arm is reversed in a circle around its axis as if nobody was in the way. Of course, when the arm comes in front of the chest, the spine has to be bent backward so as to make room for the arm to revolve. This exercise is very difficult, and affects every muscle in the body. In all these exercises the knees must never be bent, the epigastric region not allowed to incline forward, and the respiration not interrupted at any moment. The last exercise gives the finishing touch to the lungs, and a patient advanced to do it is considered an absolutely curable case. The first is generally dropped as soon as No. 2 is learned. These exercises should raise the pulse momentarily about ten beats and no more; it must return to its previous height after a few minutes of rest. Although a healthy man can not do these exercises well on the first attempt, consumptives learn to do them with the greatest ease and comfort. The purpose is to clear the bronchi and alveoli of phlegm, so as to induce the meshes of the elastic tissue to open and shut again; in other words, recreate respiration in the diseased portions.—*C. Both, M. D., in New York Medical Record.*

#### A NEW METHOD OF TREATING NASAL CATARRH.

Dr. Arthur Hartmann, of Berlin, reports a new method of treating acute and chronic nasal catarrh, which he has found of great service. This treatment is of importance to the aurist, because middle-ear troubles are not infrequently caused by nasal catarrh. The author discovered that inflation with air, during the act of swallowing, not only mitigated the ear troubles, the deafness and roaring sounds, but also relieved the frontal distension and fullness of the head. The air is simply forced into the nose with a rubber balloon, after Politzer's method for the ear. In order to ascertain the effect of compressed air, in expressing fluids from the nose, the author made a number of experiments on dead bodies. He

filled the cavities about the nose with fluids, and observed that when air was forced in the fluids were forced out. The author hereupon reports a number of cases in which the unpleasant symptoms of nasal catarrh were completely relieved in this way. To remove the crusts of ozena, he uses a brush fastened at right angles to the end of a thin flexible wire, an apparatus such as is used for cleansing tobacco pipes. The tenacious secretion is entangled upon the brush and removed. The nose is then washed out with water, and air is forced in after the manner described. —*Deutsch. Med. Wochenschr., Cincinnati Lancet.*

#### THE TREATMENT OF WHOOPING COUGH.

*Translated and abstracted from "Paris Medical," June 28th, 1877, by W. DOUGLAS HEMMING, M.R.C.S., author of "Aids to Forensic Medicine," &c., &c.*

Dr. Archambault has lately given some clinical lectures on whooping cough, at the Hospital for sick children, in Paris. He divides the disease into two phases or periods, each of which has its special treatment. 1. The catarrhal period. 2. The convulsive period. These two periods are united one with the other, and if the affection begins with a bronchitis with oppression and abundant rales, the whooping cough will be more serious than if the reverse be the case. If this period be diminished, the second will also be equally lessened and the disease will be less serious. 1. During the catarrhal period the treatment prescribed is that of ordinary bronchitis. The patient should be kept in a warm room, in winter at a temperature of 60° to 63°. If there is fever, keeping in bed should be enforced. At the same time emollient cough mixtures may be given, as, for instance, a julep containing white oxide of antimony with cherry laural water.

The chest must be carefully auscultated. If the secretion blocks up the small bronchial tubes, if there is oppression, emetics should be given. Of all these, ipecacuanha is the most preferable.

Ipecacuanha has, in fact, very great advantage as a remedy for children. It produces perspiration, brings down the fever, and produces no intestinal derangement. In the most tender age, that is to say, in the first six months of life, it may be given in the form of syrup. After the fifth or sixth month the following preparation may be used.—R. syrup of ipecacuanha 50 grammes (1½ ozs.); powder of ipecacuanha 30 grammes (1 oz.). A dessert spoonful every five minutes till vomiting is produced. From one to two years of age the dose of the powder may be raised from 5 to 15 grains.

As an emetic, Trousseau conceived the idea of using sulphate of copper. For a very young infant he prescribed,—R. sulphate of copper 1½ grains; syrup 1 oz. A dessert spoonful every five minutes till vomiting is produced. At a more advanced age the dose of sulphate of copper may be raised to 6 grains. This emetic is very sure, and occasions no diarrhoea. It may be had recourse to in cases where ipecacuanha has no effect.

When the cough is very hard, an emetic will not

be found sufficient, a calmative must be used as well.

How long should confinement to bed or to the room be maintained? As long as possible, contrary to the advice of Trousseau, Rillet, and Barthez, who have advised the patients to go out all the time. In Germany the patients are kept in bed as long as the disease lasts; this is also the advice of Dr. Archambault.

2 During the spasmodic period the first thing to do is to make the patient sit during a fit of coughing. If he remains in bed on the back there is risk of choking. The patient should stoop forward to facilitate the discharge of the mucus. If there is not sufficient expulsive power, the finger or a handkerchief may be passed into the mouth, to draw out the thready mucus, which cannot be got rid of. The principal anti-spasmodics are:

1. *Oxide of zinc*.—This is a good remedy; it may be given in doses of 2 to 3 grains during the first six months; and the dose may be raised to 16 or 18 grains above two years. It may be given as a julep aromatised with laural water. A dose every three hours.

2. *Hydrocyanic acid*. In England this acid is much employed either officinal or diluted. In France it is feared. In a small child half a drop of the officinal acid may be given every four hours. This may be pushed, according to age and tolerance of the drug, to a drop, and even to 5 or 6 drops in a julep to be taken in the 24 hours. This remedy gives sudden relief, and from this event advantages may be drawn. It must not be forgotten, however, that it is dangerous. As the preparation quickly alters it must be frequently renewed.

3. *Musk* is a very good remedy, and is not dangerous.

4. *Cochineal* passes for a good remedy in whooping cough. The following is a formula for a draught containing it: R. cochineal powder 7½ to 15 grains; carbonate of potash; syrup and water to 4 ounces. Three or four teaspoonfuls of this may be given in the day.

5. *Belladonna* has been given as a specific in whooping cough, but it does not cure it. The remedy may be given in various forms. The syrup is a good preparation. It may be prescribed thus,—R. extract of belladonna 1½ grains; syrup 1 ounce. A teaspoonful every four hours. It may also be given in pilules. The tincture is a good form for administration. Two drops every four or five hours in a suitable vehicle.

6. *Atropine* may be prepared in a solution of 1 of a grain of the sulphate in 150 grains of water. Under six months old ½ a drop of this solution must be given. Atropine is an excellent sedative, but its use requires great caution. At the same time that one prescribes anti-spasmodics, one must not neglect the catarrhal element. The chest must be constantly looked to and emetics had recourse to when the bronchi require to be relieved. We must not be afraid of causing a child to be sick, if necessary,

once or twice a day. The evening is a good time to give an emetic. The chest being relieved, a good night is secured.—*London Hospital Gazette*, July 31, 1877.

#### WHY SHOULD WE SUPPORT THE PERINEUM DURING LABOUR AT ALL, AND PARTICULARLY IN PRIMIPARÆ?

THE above is the title of a paper by Dr. E. B. Turnipseed, in the *Richmond and Louisville Journal*. Dr. Turnipseed states as his conviction, *very nearly all the resistance to the exit of the head of a child is from the transversi perinei and constrictor vaginae muscles*. The head forced down, forms a *cul-de-sac* in their neighborhood. He thus describes his method of aiding delivery:—

"I avoid tedious labour, and its frequently terrible results, simply by passing two or more fingers of the right hand into the anus, applying them firmly against the superior wall of the rectum, and pressing with great force perpendicularly upward, and if the head has already formed the *cul-de-sac*, diagonally backward and upward. Should these efforts not move the head of the child, I place two or more fingers of the left hand within the vulva, at the fourchette, pressing them between the head of the child, and the above cited parts, and using a lever force by forcing the head downward in the direction of the raphi of the perineum, and I have more than once heard the popping noise produced by the sudden movement of the head from the *cul-de-sac*, and it was at once delivered. If the head of the child should prove too large to pass, without injuring the soft parts, after fully testing the mode recommended by me, I do not hesitate to use the forceps, compressing and lifting the head perpendicularly, until the vulva is passed, thus going through the same mechanism as heretofore stated, when using the hands alone. During a practice of some twenty years, I have only one case to report of laceration."

#### THE TREATMENT OF SMALL-POX BY SALICYLIC ACID.

MR. ENGLEDEU PRIDEAUX, late Resident Medical Officer, Derby Small-pox Hospital, writes favourably of this drug in the *Med. Examiner*. He thinks it fulfils all the required indications, as it is a powerful antiseptic, and is very fatal to all the lowest forms of life; it passes into the blood materially unchanged, probably in the form of the neutral salts of soda and potash, and appears in the urine in the form of salicyluric acid, and may be detected by the addition of a few drops of tinct. and ferri perchloridi, which produces a characteristic violet colour. When pure it may be given in large doses, as much as half an ounce in twenty-four hours; when given in these large doses it is apt to produce a marked depression, but this he finds is obviated by giving small doses of carbonate of ammonia. He gives it in solution with carbonate of ammonia and bicarbonate of soda in the proportion of five grains of each of these to twenty grains of the

acid. This mixture is most pleasant to the taste and perfectly unirritating to the intestinal canal, and in some sixty or seventy cases he has never known it to produce sickness. This is in reality giving salicylate of soda and ammonia no salicylic acid.

At the Small-pox Hospital, Derby, he reports having treated twenty-nine cases of small-pox with salicylic acid, or rather with the salicylates, all of which recovered, and all with the most marked results, both as to the progress of the disease and the subsequent pitting.—*The Doctor*, London, July, 1877.

#### AN ERROR IN THE PHARMACOPŒIA.

We believe the last issue of *The British Pharmacopœia* has been as carefully edited, and that it is as free of errors as a book can well be. A rather important mistake, however, occurs at page 180, and as it embraces the difference between ounces and drachms, we draw attention to it in order that our readers may alter it in their own copies of the work. *Liquor arsenicalis* is printed thus:—"Take of Arsenious acid, in powder } of each 80 grains.  
Carbonate of potash..... }  
Compound tincture of lavender.... 5 fluid drachms.  
Distilled water..... a sufficiency."

The 5 fluid drachms of comp. tinc. lav. should read 5 fluid ounces.—*Dublin Medical Press*.

DR. GRIFFITH recommends the following application to the ulcerations in the severe and very painful sore-throat of scarlatina: chloral, five grains; glycerine, twenty-five grains. After this has been applied with a brush the pain is much diminished, and the patient can swallow medicine or food without the severe pain which the action caused before.—*New York Med. Jour.*

#### CONSOLATION FROM STATISTICS.

"And it is really true that I shall recover?" asked a patient of his doctor. "Infallibly," answered the man of medicine, taking from his pocket a paper full of figures. "Here, look at the statistics of your case; you will find that one per cent. of those attacked with your malady are cured." "Well?" said the sick man, in a dissatisfied manner. "Well, you are the hundredth person with this disease that I have had under my care, and the first ninety-nine are all dead."

#### PRESERVATION OF A FAVORITE MINISTER.

A minister was called to see a man who was very ill. After finishing his visit, as he was leaving the house, he said to the man's wife, "My good woman, do you not go to any church at all?" "Oh yes, sir, we gang to the Barony Kirk." "Then why in the world did you send for me? Why didn't you send for Dr. Macleod?" "Na, na, sir, deed no; we wadna risk him. Do ye no ken it's a dangerous case o' typhus?"

# THE CANADA MEDICAL RECORD

## A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D. L.M.C.P., LOND

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### THE CANADA MEDICAL ASSOCIATION.

We can hardly realize that it is ten years since the organization of this Association in the good old city of Quebec, and yet such is the fact. On the 12th and 13th of this month, its tenth annual meeting was held in the Ladies Ordinary of the magnificent new Windsor Hotel, in this city, and although we are unable to chronicle a very large gathering, yet the attendance was good, and the general impression at its close was that the tenth meeting had been the most successful of all. As will be seen from the official report which we publish in another column, the meeting was highly honored by having on its platform so distinguished a man as the Right Hon. Sir Lyon Playfair, C.B., and M.P. for Edinburgh University. His address in acknowledgment of his election as an honorary member of our Association was couched in language, and contained sentiments which were pleasant to those who heard them. The delegates from the American Medical Association mustered in force, and were seated on the platform, and received a most cordial welcome. Dr. Kimball of Lowell, Dr. Wing of Boston, and Dr. Brodie of Detroit, have left behind them many pleasant memories of their visit, and take back to their homes the warm wishes of the many friends they made while here. We need not refer to the details of the meeting, as they will be found in another portion of the *Record*. We would, however, say that most, if not all, the papers read were of great value, and it is therefore with no ordinary pleasure that we announce that the Publication Committee have been able so to arrange matters that within a couple of months the whole proceedings will be issued in the form of *Transactions*. To us it has always been a matter of regret that the financial condition of the Association did not hitherto warrant the publication of the "*Transactions*," and that it is now impossible ever to get a permanent record of the first nine years of the Association's existence. The extent of this loss we cannot appreciate now, perhaps never will, but there will come a day when this loss will be mourned over,

and the apathy and indifference which caused it will be condemned. In the action which the Publication Committee have taken with reference to the issue of the transactions, they are sustained by the guarantees of a large number of the members of the Association, and when the volume is issued we trust every member will take a copy. This action of the Publication Committee prevents our doing more than publish an abstract of the proceedings, as the various papers must first see light in the *Transactions*.

The election to the presidential chair of Dr. Joseph Workman of Toronto was unanimous, and it was fitting that a man who stands so high in his department of medical science should receive with so hearty a good-will the highest gift in the hands of the profession of the Dominion to bestow. The retiring President, Dr. Hingston, filled the chair during the Sessions of the Association with dignity, and his address, which we hope to publish ere long, was received with much approbation.

During the Sessions of the Association there were on side tables in the room, exhibitions of instruments, &c., from F. Gross, in Montreal. A variety of pharmaceutical preparations were also exhibited by various firms. Messrs. Kenneth Campbell & Co., of Montreal, a firm whose reputation as first class chemists is known throughout the Dominion, made an excellent exhibit. They had a number of very beautiful Elixirs of their own manufacture on exhibition, at prices very low compared with other manufacturers. They also showed some specimens of Norway Cod Liver Oil, which were remarkably free from any disagreeable odor, and was bland and not unpleasant to the taste.

John Wyeth & Brother, of Philadelphia, also had an excellent exhibition of their new Dyalised Iron, which is being largely used by our Montreal Physicians. They also exhibited a variety of Elixirs, and some beautiful Compressed Tablets of Chlorate of Potash. The latter is an elegant method of prescribing this Salt.

W. H. Scheffelein & Co., of New York, exhibited some beautiful specimens of Soluble Pills and Granules, which were greatly admired by the members of the Association. This firm has made arrangements with Messrs. Lyman, Clare & Co. to keep a supply of their specialties on hand. We intend writing further at some future time, when we hope to be able to write from experience.

We had almost forgotten to say that lunch was

provided each day in the basement of the hotel for the members of the Association.

On the evening of the first day Dr. and Mrs. Hingston had an "At Home," which was very largely attended, and on the evening of the second day the Association was tendered a magnificent dinner at the City Club, by the Medical Profession of Montreal. The Chair was occupied by Dr. Hingston, the Vice-Chair by Dr. Francis W. Campbell, while Dr. R. P. Howard and Dr. E. Robillard acted as Croupiers. A very pleasant evening was passed, not the least interesting part of which was the reply of the Right Hon. Sir Lyon Playfair, C.B., to the toast of "Our Guests."

We would add just a word more, and it is to commend this Association to the Profession of the Dominion. Attend its next meeting at Hamilton all who can, enrol yourself as a member, and we are certain you will feel amply repaid for the small sum it will cost.

**SUITS FOR FEES.**—The Fellows of the Royal College of Physicians of London never sue their patients for medical services.

#### COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

The Board of Governors of this College met in the Laval University, Quebec, on the 26th and 27th of September. The attendance was large. The new by-laws were passed and ordered to be submitted to the Governor for approval. A tariff for the town, and one for the country, was adopted. The following gentlemen were appointed Censors to attend the examinations for degrees at Universities. *Laval University*.—Drs. Marsden and Wells, of Quebec. *McGill University*.—Hon. Dr. Church of Aylmer, and Dr. Mignault of Actonvale. *Bishop's University*.—Dr. Gibson of Dunham, and the Hon. Dr. Paquet of Berthier. *Montreal Medical School* (Victoria College).—Dr. Angus C. Macdonnel of Montreal, and Dr. F. Painchaud, sen., of Varennes.

We regret to have to announce the sudden death of our valued friend Dr. J. D. Cline, House Surgeon of the Montreal General Hospital, from an attack of diphtheria. The sad event took place early on the morning of the 29th of September.

**FALLING OUT OF HAIR.**—Prof. Erasmus Wilson, in cases of defluvium capillorum, prescribes a lotion composed of strong liquor ammonia, almond oil, and

chloroform, of each one part diluted with five parts of spirits of wine or spirits of rosemary, and made pleasant as to fragrancly by the addition of a drachm of the essential oil of lemons. This should be dabbed upon the scalp after thorough friction with the hair brush. No doubt there are cases in which this lotion must be used with caution, or largely diluted. In cases of alopecia he recommends frictions with a liniment composed of equal parts of the liniments of camphor, ammonia, chloroform, and aconite, to be well rubbed into the bare places daily.

#### BRITISH MEDICAL ASSOCIATION.

This Association met in Manchester, at Owen's College, on the 7th, 8th, 9th and 10th of August. This was the third time the Congress met in that city,—in 1836, in 1854, and this year. On the first occasion the Association numbered 600 members, on the second, 2,000, and this year it numbered over 7,000. The gathering was one of much interest, Dr. Roberts giving the address on Medicine; Dr. Spencer Wells, that on Surgery, and Dr. Barnes, on Obstetrics.

#### PERSONAL.

Dr. F. LeM. Grasset, of Toronto, has been elected a Fellow of the Royal College of Surgeons, Edinburgh, also a Fellow of the Obstetrical Society of the same city.

The Canadian Journal of Medical Science, for August, says, it is reported that a Medical School is to be started in Ottawa.

Dr. Fulton, Editor of the *Canada Lancet*, has been elected to the Senate of Toronto University, as the Trinity School representative.

#### ELIXIR OF THE PHOSPHATES AND CALISAYA.

The Elixir Ferri et Calcis Phosph. Co., prepared by Dr. Wheeler, of Montreal, is a reliable and elegantly prepared combination; we know its composition, and have used it extensively in practice, with much satisfaction.

#### BIRTH.

At Cumberland, Ont., on the 13th July, the wife of Dr. James Ferguson, of a son.

#### DIED.

At Kingston, Ont., on the 4th July, H. A. Betts, M.D., aged 68 years.

In Montreal, on the 29th September, of diphtheria, J. D. Cline, B.A., M.D., House Surgeon, Montreal General Hospital.



THE

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*Consulting Physician to Montreal Dispensary, and Attending Physician Women's Hospital.*

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## Original Communications.

*Oblique Fracture of the Thigh treated by Extension.* By JOHN BELL, M.A., M.D., Physician to the Montreal Dispensary and to the Infants' Home.

On May 18th last, David N., aged 30, while working on a roof, slipped and slid down to the eave, which he caught with his hands and remained hanging for some minutes. Underneath was a platform of planks, one of which was missing immediately below him, and on letting go his hold, he fell with his legs rigid, one going through the hole, and the other (the left) foot, striking the platform, sustained the whole momentum of the body, causing the left femur to be fractured between the middle and upper thirds of that bone. He was conveyed home in a carriage and suffered excruciating pain in the transfer. I was called to see him only after several hours had elapsed, and found him lying on the floor, with the thigh bent outwards, and the muscles swelled out into hard lumps from the spasm. He lay in a semi-conscious state, yet suffered such agony when any examination was attempted that it was necessary to give chloroform, which was done by the assistance of Mr. C. Fenwick. Audible crepitus was at once obtained, and the lower part of the femur, extended, could be moved in any direction. I now rolled a long piece of canvas around both legs and the body, and had him removed to the only bed available, and which had been previously prepared; a woollen "cloud" was fastened in a "clove hitch" around the ankle, passed through the end of the bed, and two smoothing irons attached to the dependent end. The legs were now equal in length and similar in position, and movement was prevented by the canvas binder. On recovering from the chloroform he remarked the very great relief and freedom from pain he experienced.

May 19th.—Had a comfortable night; no pain; lying easy.

May 20th.—Rested comfortably and had no pain. The canvas roller removed.

May 21st.—He had pain in the leg last night; none now.

May 22nd.—The "cloud" removed, and extension made from strips of plaster along the leg, kept applied by bandage. The lower legs of the bed to be raised.

May 25th.—Swelling of the thigh gone. Long narrow sand-bags to be used to steady the leg and keep it from rolling round. His bed being a little

too short there is sometimes  $\frac{1}{2}$  inch to  $\frac{3}{4}$  inch shortening, which is pulled out when the body is drawn up in the bed. No pain.

May 26th.—Eating lightly; bowels keep regular.

May 28th.—Had bed arranged so as to have leg extended to full length; knee-joint somewhat swollen out with fluid, probably from injury from concussion and strain. Callus beginning to form.

June 18th.—Nothing of note from last date; applied glue bandage to leg, thigh and pelvis, with thick pasteboard splints around the site of the fracture, which has now quite united.

June 20th.—Walking about the house and yard with crutches and glad to get lying outside in the fresh air.

June 22nd.—Applied additional short, wooden splints to the outside and inside of the thigh for further security against bending of the femur.

July 3rd.—Moves his leg with freedom; still sore if rested on.

July 15th.—Splints only on the thigh; is able to walk alone.

Aug. 4th.—Eleven weeks from the date of the fracture the patient was examined by the members of the Medico-Chirurgical Society at their meeting of this date, and only one-half inch of shortening was found. Subsequently the patient has done well.

On extending the injured limb to its full length the fractured ends of the bone naturally came into apposition, being guided to and retained in their place by the surrounding tissues. The relief to the pain was most marked and gratifying. The limb easily retained its proper form, for, being movable at the hip and kept constantly extended to its normal length between the hip-joint and point of attachment of the weight, the parts naturally assumed their true positions even if the patient moved the rest of the body. It seemed to me from careful measurement, after the first irritation had subsided and the callus began to form, that the femur was drawn out to its full length. After, however, the glue bandage had been applied and he began to walk about, a certain amount of shortening took place; this might have been even less than it was, had he been kept on his back with extension applied until the bond of union had become more consolidated. After the glue bandage had been removed a considerable amount of thickening was found in the region of the lesser trochanter, evidently from some splinting of the bone having occurred at the time of the accident.

1 Belmont Street, Montreal, Oct. 16, 1877.



*Case communicated by Dr. CARR H. ROBERTS, L.R.C.P., M.R.C.S.E., L.S.A., Shrewsbury, England.*

In July of last year (1876), being at that time joint medical officer of health to the Alderbury Union, at Salisbury, in Wiltshire, I was requested by the coroner to make, in conjunction with my friend and colleague, Dr. Gordon, a *post mortem* examination on the body of an infant, which was discovered by the police under the following circumstances :—

An anonymous communication was received by post, at the city police station, stating that if the police searched the houses in a certain court in the city, they would find a dead body. A number was given; but, on a policeman being instructed to go there, he found no such number, and returned, thinking it a fruitless errand. The superintendent, Mr. Matthews, however, being a sharp and shrewd man, resolved to have the matter thoroughly sifted, and a house to house investigation was instituted, with the result that, on coming to a certain house, they found a woman sitting in a room down stairs, where was a large fire with a saucepan on it, apparently boiling. From her appearance and information received, she was taxed with having been recently confined. This she at first strenuously denied, but ultimately confessed, with the qualifying remark, that "it was only a little one." On being asked where it was, she replied "there," and pointed to the saucepan. On the lid of the saucepan being removed, something *tied up* in a cloth was seen, which, on being out and untied, was found to be the body of an infant child. The woman was, of course, taken into custody, and the saucepan with its contents removed to the station house. This being late in the evening the *post mortem* was made the following morning, when the remains presented the following appearance :—

It appeared to be the body of a full grown, fully developed male child, which had been doubled up so that the head nearly touched the toes, and tied up in an ordinary cloth, as a cook would tie up a pudding. The umbilical cord appeared to have been either broken or torn, it certainly was not cut, and from seven to ten inches in length. It was impossible, even had it been material, to judge the length on account of its shrunken state. One arm on one side, and one thigh on the other, were separated from their respective sockets, and the whole of the body presented more the appearance of extremely overboiled veal than anything else I could

compare it to. The contents of the chest were utterly disorganized, and so completely, as to be almost unrecognizable. The bowels were not *quite* so bad, and were quite empty; there was, as we thought, a trace of meconium, but it was quite evident that no food had been administered. The whole of the body was covered from head to foot with small pustules or blisters, each containing fluid of a greenish yellow, or rather a straw color, and this fluid was, in every case, either in a higher or lesser degree of coagulation. The bones of the skull were completely separated, and the contents had almost entirely disappeared. Whether there had been any violence used was, of course, impossible to judge, the body had been so completely boiled that there was no line of redness to be made out; the weather was intensely hot, but there was no sign of putrefaction.

The woman (who was a widow, her husband having died about six months previously, after suffering for more than a year from sickness, which would utterly preclude the possibility of copulation even, far less that of procreation) was committed for trial by both the magistrates and the coroner's jury, on the charge of "wilful murder," and was tried at the following assizes, in the autumn, at Winchester, and after a protracted trial was acquitted of the capital charge, but found guilty (indeed, pleaded so) to concealment of birth, and sentenced to imprisonment for fifteen months, she having already been in prison nearly four; two years, unless I am mistaken, being the maximum for that offence.

*Remarks.*—The interest and excitement that this case caused, of course, arose not merely from the (I believe) unparalleled attempt to dispose of an infant in this unique manner, but from the question as to whether the child was put into the water *alive* or *dead*. Horrible and atrocious as the former supposition may be, I could come to no other conclusion than that it was so, on account of the blisters on the body containing serum, or a fluid strongly resembling it. I have since, I understand, been asked in an indirect matter, "What tests, if any, were applied." I would ask what tests could be applied? the lungs were gone, and as for testing for albumen, the fact that the contents of some of the blisters were coagulated and some not, were to me conclusive. I know no animal that, on being subjected to the action of intense heat after death will have blisters containing *fluid*, containing *air* alone is a different matter. In this county, and I presume in many others, it is a common thing after

a pig is killed (and I imagine a pig presents the nearest approach as regards its skin perhaps in many others to a human being) to subject it to the action of boiling scalding water to remove the hair. I have seen some hundreds so subjected, as well as their being covered with straw and then being set fire to with the same object; but never, in any instance, have I known them having blisters containing *fluid*. I have seen legs of mutton and fowls, after having been either boiled or roasted, brought to table, and in some instances have seen blisters on them, but never, in any one instance, containing *fluid*.

Should any of your readers have an opportunity of proving or disproving the theory, I trust they will make it known. Having had no such opportunity previously, I based my opinion on the experiments made by Christison and others, and reported in *Taylor's Medical Jurisprudence*, chapter 38, and more especially pages 396 and 397. I am afraid I have taken up a considerable amount of your space, but the importance and interest of the subject will, I trust, plead my excuse. I omitted to say that some flannels were found in which the infant had evidently been wrapped, and that they presented the usual appearances. The woman was engaged to be married to a man who swore on the trial that he was not the father and did not even know the woman was "enceinte."

## Progress of Medical Science.

### ON NON-INSTRUMENTAL AIDS TO LABOR.

By WILLIAM STEPHENSON, M.D., F.R.S.C., Edin., Professor of Midwifery, University of Aberdeen.

*When may we, with Advantage, Rupture the Membranes before full Dilatation of the Os?*

Many a shrewd practitioner, with but little knowledge of the science, has acquired from experience very considerable skill in the art of obstetrics, more especially in many little details, whereby a normal but a tardy labor can be facilitated. Such experience, however, is blind and liable to error, until the scientific basis on which it rests is understood. Before even the science of midwifery existed, it was found that a change in the position of the patient was often very effectual in accelerating a lingering labor. Under such circumstances, it was a common resource to get the patient out of bed, make her kneel on the floor, or sit between a couple of chairs. This is often of great service, and a scientific explanation can be given why it should be so. But there is one condition where the labor is certain to be tedious, and where an ignorant midwife, or

medical attendant is very likely to try the above plan, with the result of only aggravating the evil. In this case, the cause of delay is a pendulous abdomen; and a knowledge of the normal axis of the uterus directs the attendant to lay the patient on her back and apply a binder. This illustration is a good example of a non-instrumental aid to labor, and also of the precision which is given to treatment by scientific knowledge, as compared with the blind, and oftentimes bungling actions of empiricism.

There are many ways by which an enlightened and experienced obstetrician can thus materially help off labor. Some, as the one referred to, are described in books; of others, no mention is made, but they are left to be acquired by experience; and more, the result of such experience is at times found to be entirely at variance with the principles laid down by the authors of our text-books. Such is the case in question which I propose to discuss on the present occasion: When may we, with advantage, rupture the membranes before the full dilatation of the os? I may mention that this question has reference only to normal labor, where the head presents, and there exists no contraction of the pelvis, but where the progress of the first stage is retarded.

As a part of the history of our art, it is interesting to observe how exaggerated were men's ideas regarding the importance of retaining intact "Nature's wedge," and how patiently and reluctantly former practitioners would wait, under the dread of being meddlesome, for nature to do what they could readily have done, even when convinced that the non-rupture of the membranes was the cause of the delay.

There is still remaining at the present day, much of the dread of having too early recourse to this simple operation. In the face of the fact that much and often long-continued ineffectual exertion is often due to the integrity of the membranes, even before full dilatation of the os, and the other fact that such ineffectual work is often productive of serious after-complications, there is certainly a want of discussion on this point in our recent works. Leishman speaks of it where there is unusual thickness and resistance of the membranes: "But before we decide on rupturing them, we should be sure that the proper function of the membranes has been effected in producing dilatation of the os." Playfair recommends puncture before completion of the first stage, only when the liquor amnii is excessive in amount; and renews the oft-repeated and considerably exaggerated caution: "If we evacuate the liquor amnii prematurely, the pressure of the head on the cervix might produce irritation, and seriously prolong the labor." This latter point is a question upon which the members of this Society might with profit express the results of their experience; in how far they have observed that irritation is produced, and the labor delayed, in cases where the membranes have ruptured, or been punctured before, early in the first stage. The term irritation is vague in the extreme, and conveys no definite idea to the mind.

Before entering on the discussion of our question,

it is well to define what is the exact meaning in which various terms are to be employed. By *full dilatation* of the os is meant, not obliteration, but only that degree which we know will permit the ready passage of the head; whilst the state in which the uterus and vagina are one continuous canal, should be designated as *complete obliteration* of the os. The term *os* itself should be confined to the lumen of the *cervix*, and the latter term be always employed when speaking of the state of the tissues which compose it. *Dilatation* also should be limited to speaking of the size of the os, while we speak of *expansion* of the *cervix*.

In reference to the puncture of the membranes, I have state practice is at variance with teaching. Whilst our books say that this should not be done except in rare cases, until the full dilation of the os, many practitioners have found that, by experience, they can recognize certain favorable conditions, especially in multiparæ, where it is of great advantage to evacuate the waters when the os is not more than half dilated. We have seen that formerly there existed a very exaggerated idea of the function of the amniotic bag; that its purpose was supposed to be the dilatation of the whole length of the parturient canal; and that it should be punctured when protruding at the external orifice. Modern opinion now regards the integrity of the membrane as no longer of any value after the full dilatation of the os; and it remains to be seen whether their true function should not be further curtailed, and that what at present is still empirical in practice, does not rest on pure scientific grounds. The question must be answered by direct observation, and not by any imaginary views regarding the action of "Nature's wedge," the fetal head being quite as much a wedge of nature as the bag of waters.

In discussing obstetric problems involving the first stage, it has been too exclusively the custom to take the degree of dilatation of the os, and the softness or dilatability of the tissues, as the criterion of the amount of progress made in the process of labor. This, it is easy to show, is an error; and, in forming an opinion, we must take cognizance of something more. It is a matter of common experience to find that the membranes rupture spontaneously while yet the os is but slightly dilated, and that the head at once descends and comes into contact with the whole lower segment, the parturient ring being in close relation to the head. Again, it is likewise a matter of common experience that the membranes give way when the os is of the same size as in the first case, and yet the head does not come into close relationship with the parturient ring; the *cervix* of the lower uterine segment in this case has not in its upper part been expanded to the full diameter of the head. If the finger be introduced well through the os, it is possible to feel the head resting on a ring of firm tissue. Sir James Simpson describes this as an adventitious band of fibres which delays the first stage. It is nothing more than the unexpanded structure of the lower uterine segment. It is evident that, although the os was of the same size in both cases,

yet that the mechanism of the first stage was, in the first instance, in advance of the second; and that the difference lay in the degree of expansion of the lower segment, not in the dilatation of the os.

Next, take what is also a matter of common experience, the condition of parts after delivery. The *cervix* is found hanging in the vagina open, loosely relaxed, and elongated; while above, the walls of the uterus are firm and contracted, barely admitting the finger. From this observation (see also Matthews Duncan on *Mechanism of Natural and Morbid Parturition*), together with an examination of Braune's section of the frozen body of a female in the second stage of labor, it is evident that what occurs in the process of the first stage, is not the mere opening up of a canal or tube which has been simply constricted in its middle; but, in addition to a constriction, there also exists a diaphragm, obstructing the lumen of the passage, and this obstruction is overcome by longitudinal as well as lateral stretching of this diaphragm. In easy labor, the constriction and diaphragm disappear simultaneously; but it frequently occurs that the disappearance of the first is in advance of the second, and the canal is dilated to its full, whilst the diaphragm has only been strained. No increase in the size of the os has taken place.

By studying the mechanism of the first stage, we can readily understand the production of these two effects of expansion and longitudinal stretching. By muscular contraction, the contents of the uterus are exposed to a uniform pressure. This force Schulz has called the "internal uterine pressure." It is exerted on the waters, and must, therefore, be equal in all directions; and, as the lower portion of the uterus is the weaker, it must yield. This, then, is the expansive force. But as the uterus also tends to shorten itself in its longitudinal diameter, there is also a longitudinal direction given to the force, whereby it becomes expulsive. This, from the tendency of the uterus to assume its original form, Schulz terms the "form restitution power; but, as its direction is in the axis of the uterus, I would speak of it as the *axial* force, a term more congenial to our language.

When the membranes are yet entire, this axial force can act only through the ovum as a whole, waters and foetus; and, therefore, at a disadvantage in proportion to the quantity of the liquor amnii. When this is large, as in hydramnios, the disadvantage is at its greatest; the force, in fact, being entirely converted into the uniform internal pressure. When the relative proportion between the quantity of waters and the size of the foetus is less as we find it normally, then the axial force is brought to bear on the foetus; the fundus, acting on the breech, presses the child downward, and the head is brought to bear on the lower uterine segment. When the internal uterine pressure is greater than the axial, the waters are forced downward past the presenting part, which recedes. When, however, the axial force is the greater and can act through the foetus, the contrary effect results; the water is forced upwards, and the head is brought into close proximity with the lower

portion of the uterine walls. When the child is thus forced down during a pain, the uterine walls closely surround the head, and the membranes being still entire, the liquor amnii is divided into two portions; that in the front of the head is called the forewaters. If the division be complete, then the entirety of the membranes is really a disadvantage; for now the forewaters but impede the more powerful action of the axial force. If the separation be incomplete, then the expansive action is only obtained, the internal pressure being still in excess of the axial. If the reverse be the case, the forewaters are but forced back above the head. By the mode of action, the internal uterine pressure is the force which tends to expand the lower uterine walls. Acting, in fact, like a glove-stretcher, its expulsive power can only act on the entire ovum, and is, therefore, at a disadvantage. The axial force is exerted mainly through the fœtus, and can exert its full strength only after the membranes are ruptured.

It seems, therefore, evident that *the function proper of the bag of waters should be limited to that of expansion only*. But the full dilatation of the os is effected, not by expansion alone, but also by longitudinal stretching. When, therefore, we find dilatation tardy from defect in degree or direction of the power alone, and not from any inherent character of the tissues, when once it is evident that the lower segment of the uterus is well expanded, the rupture of the membranes is the most effectual means of favoring the dilatation, by bringing the axial force into full action, and this irrespective of the degree of the size of the os.

By the researches of Dr. Matthews Duncan on the Power of Natural Labor, a beginning has been made to place this subject on a more purely scientific and accurate basis; but we are not yet in a position, and it requires qualification which few possess, to follow up the subject as he has done. He has, however, shown mathematically what has been long practically known, that partial evacuation of the liquor amnii is an efficient way of improving the power of the uterus, even when defective in amount. "It is a common belief," he says, "that the uterine pains increase in strength after the evacuation of the liquor amnii. Whether this be true or not, as commonly believed, I do not here consider. But it is certain that if the uterine contractions remain of the same force after as before the partial evacuation of the liquor amnii, the power of the labor or the extruding force will be increased, as the curvature of the contracting organ is increased."

Having laid down the basis of our knowledge, it remains only to discuss the diagnosis of the conditions which warrant us in having recourse to rupture of the membranes before the full dilatation of the os. The first point is the determination of the degree of expansion of the lower uterine segment. We have seen that the size of the external os is no criterion of expansion. The os, in fact, may be very small, and yet expansion may be complete. It is by the internal os that we can best judge, but this is hard to reach, and difficult to determine its exact

site. There is one means, however, of ready access, whereby we can form a proximate opinion: it is the degree of dilatation or up-drawing of the vaginal *culs-de-sac*. This is a point which has been entirely left out in the consideration of the progress of the first stage. It is a matter of common experience to find in the class of cases where we feel something is required to promote a labor with tardy dilatation of the os, that the upper part of the vagina is well expanded and drawn up, greatly increasing the perceptible diaphragm of the cervix, which alone obstructs the continuity of the developed canal. Now, we know that the longitudinal muscular fibres of the vagina run upward, and are continuous with those of the body of the uterus, and that the attachments of the uterus in their upper portion correspond with the internal os. This portion, then, cannot undergo expansion without carrying with it the tissues which are in connection therewith. Consequently, we find that, as the first stage of labor advances, the upper part of the vagina is dilated until it seems to coincide pretty closely with the upper part of the bony canal. When, therefore, a considerable portion of the lower segment of the uterus can be felt in the vagina, and not merely *through* its walls, expansion is certain to be complete, whatever may be the size of the parturient ring; and the tissues composing it are those of the cervix proper and not the uterus. Under such circumstance, I believe the membranes may be ruptured with advantage. It is, however, unnecessary in many cases to wait for the full development of the condition above described. I have taken the extreme state as being most readily understood, and indicating the direction in which our observation should be made.

Another class of cases, or it may be only an additional character to those of the first, are where the action of the uterus seems to be effecting, not steady dilatation, but extreme thinning of the tissue of the cervix; and also where the head is felt to be in close contact with the parturient ring, there being little or no bag of waters.

The next point to be considered is the quantity of liquor amnii; not the actual quantity, as is generally referred to when speaking of it being present in excess, but the proportion its amount bears to the size of the child, and also to the capacity of the amniotic sac. This latter is rarely quite filled; otherwise it would remain much more tense than it usually does in the intervals between the pains. If it be nearly or entirely distended, it will interfere with the power of restitution of form, by preventing alteration in the form of the uterus, and consequent action on the fœtus, even though the actual quantity of waters is not greater than ordinary. In this circumstance, it must be regarded as really in excess, quite as much as where there is excess in actual quantity. Undue tension, therefore, of the membranes *during a relaxed state of the uterus* must be regarded as unfavorable to the mechanism of labor, and as warranting an earlier rupture of the membranes, than under other circumstances.

The liquor amnii must also be considered in ex-

cess, irrespectively of actual quantity, if it be unduly great in proportion to the size of the child. Here, again, it interferes with the action of the force which restores form, or the axial force. If, therefore, the parts of the child be not recognizable externally with ordinary facility *during a relaxed state of the uterus*; if *ballotement* be unusually facile, and especially can be felt during a pain, the probability is that there is a true excess of liquor amnii; and this condition would fully warrant the rupture of the membranes before the full dilatation of the os; the other conditions being favorable to the operation.

I have discussed this subject apart from the state of rigidity or dilatability of the cervix, conditions which undoubtedly must be taken into consideration in determining any line of treatment in the first stage; but the subject of rigidity is one which requires discussion by itself, and would only tend to complicate and obscure the question.—*Clinic, Cincinnati*.

#### AMYL-NITRITE IN PERTUSSIS.

Dr. George Bayles reports experiments made with amyl nitrite in ten cases of pertussis. In all the cases the usual remedies proved as ineffectual as usual, and the whoop was established when the physician was called. In every instance, save one, regular treatment began with quinine, but sooner or later in each case amyl nitrite was employed. The other remedies used, as quinine, chloral hydrate, etc., all tended toward accomplishing the desired object, and though each gave evidence of its prime utility, it was reserved for the amyl to be the most prompt remedial.

"In quinine there appears to be a real antidotal action to the specific root-element of this disease (whatever that may be); employed throughout the progress of the disease, it cannot but be of advantage. Chloral is a sedative nerveine of very efficient action, and beneficial in an eminent degree where nervous excitement is intensified by the apprehension of an approaching paroxysm of coughing. This agent, therefore, was the most serviceable in the cases of the elder patients.

"Amyl comes in as a direct anticipatory measure for the relief of the cough as to its frequency, and also its pacification as to paroxysmal energy. From this point on, the cases must speak for themselves, and, I think, they will be found to illustrate the positive value of nitrite of amyl in allaying the violence and limiting the duration of the cough of *pertussis*.

In all cases reported there was a diminution in the force of the cough, the sound of the whoop was not as marked, and the intervals between the paroxysms were lengthened, when amyl was employed. The remedy is given at the commencement of a paroxysm by inhalation, varying in size from one minim for a child five or six months old, to three minims in one at the age of twelve. The best way to administer it is to drop the amyl into the bottom of the interior of a tea cup which is to be inverted over the mouth and nostrils of the patient, not so closely, however, that

the edges of the cup would come in contact with the surface of the skin. This should be done the instant the period arrived for the violent cough to be repeated. The cough commencing and gather force is a signal to use the amyl. The prompt effect is so to modify the paroxysm as to silence the peculiar sonorous inspiration, repress the vomiting, and to allow the cough to assume the character of that which belongs only to acute bronchial catarrh.—*Virginia Medical Monthly, August, 1877*.

#### THE DESTRUCTION AND EXPULSION OF UTERINE FIBROIDS BY ERGOT.

Dr. William H. Byford, who contributed to Vol. I. *Gynæcological Trans.*, a report of three cases of uterine fibroid in which the administration of ergot resulted in their piecemeal expulsion, reports in the *Archives of Clinical Surgery*, an additional case showing the great value of this agent. The patient was aged forty-seven, and had for three years been the subject of severe hemorrhage, leucorrhœa, pain in the uterus and general prostration. Examination revealed a large fibrous tumor of the uterus which extended to within two inches of the umbilicus, filling up the hypogastric region and extending to the ilium on the left side. The uterine cavity admitted the sound fully five inches. Dr. B. at once prescribed thirty drops of Squibbs fl. ext. of ergot three times daily, this dose gradually to be increased to one drachm. At first it had no perceptible effect; in a few days, however, the pain became so great that the medicine had to be omitted for several days at a time. It was resumed in smaller doses until the pain returned too severely, when it was again temporarily discontinued. She continued the medicine in this way until January 13th, 1877, when the tumor began to break up and be discharged. In a letter to Dr. B., the patient describes the appearance of the material discharged as "like sausage meat from a stuffer," four inches of which would be extruded and cut off daily by the patient. Its discharge was accompanied by sharp spasms of lancinating pains and an intolerable stench. On the 26th of January, the last portion was discharged, after which the patient soon regained perfect health. In commenting on this case, the author remarked that "in the intramural tumor where the neoplasm is so situated that the greater portion of the muscular fibres surrounding it lies outside, the persistent use of ergot if it causes contraction will be very likely to cause its expulsion." The constant pressure on the fibres which lie on the inside, impairs their nutrition and soon results in rupture. With proper care in the examination of cases—with a view to determining the site of the tumor—the cases in which ergot will result in their expulsion, can be predicted with a reasonable degree of assurance.

#### WHEN NOT TO GIVE IRON.

In the current number of the *Practitioner*, Dr. Milner Fothergill has contributed a few very practical remarks on the contra-indications for giving this



drug. As long, he says, as there is rapidity of pulse combined with rise of temperature, so long must iron be withheld in the treatment of acute disease. As long, moreover, as the tongue is thickly coated, or red and irritable, it is as well to withhold chalybeates altogether. This is particularly true of phthisis, no matter what the other indications are, it is useless, and sometimes worse than useless, to give it unless the tongue be clean without irritability.

It may be laid down as a general rule that this toleration of iron diminishes as the aged increases. Young children take iron well, and it is often well borne by them in conditions which in the adult distinctly forbid its use.

There is one condition where iron is absolutely forbidden, and that is the condition known as biliousness. As long as there is a foul tongue, a bad taste in the mouth, and fullness of the liver, with disturbances of the alimentary canal, iron is not only of no service, but positively does harm. Sir Joseph Fayrer's Indian experience is in full accord with this expression of opinion. In speaking of the treatment of hepatic congestion accompanied by anæmia, he lays stress upon the resort to purgatives and vegetable tonics and the avoidance of iron, until the biliary congestion is removed. "When the portal circulation is relieved some preparation of iron may be useful."

When given in large doses iron always blackens the stools, but if given in moderate doses and well assimilated this blackening is not so marked. The colour of the stools, then, may be utilised as an indicator as to how far chalybeates are assimilated and are likely to be useful.

There are two different states found in women where iron is either totally contra-indicated or to be given with great caution. The first is a condition of amenorrhœa in florid, plethoric persons. The other is the opposite condition of menorrhagia in certain females. There are cases of menorrhagia associated with pallor and debility, where the usual compound of iron and extract of ergot is not so useful as a non-chalybeate treatment. In these cases it is not any imperfection in the process of blood manufacture which is to be remedied, for the blood is made rapidly and quickly, only to be lost at each menstrual period. It is here desirable rather to limit the rapidity of the blood formation, so that when the several vascular turgescence of the menstrual period comes, it will not find the blood-vessels too distended with blood. This will lead to diminished catamenial loss, and so the blood waste will be economised. According to the experience of Dr. Brown Séquard and Dr. Hughlings Jackson, iron does not suit epileptics. It increases the tendency to fits. It may improve the general condition, but it aggravates the epilepsy.—*Dublin Medical Press*, Oct. 3.

#### THE IMMEDIATE CURE OF DRUNKENNESS.

Dr. Z. Collins McElroy reports (*Cincinnati Lancet and Observer*, July, 1877) a case of chronic drunkenness cured in a few days by a peculiar method of treatment. As the evil of intemperance is at-

tracting great and increasing attention, we give a condensed summary of the method of treatment and its results.

The patient, P. B. A., was a lawyer, aged fifty-seven, married, had a grown-up family, had been a drinker for forty years; had sacrificed home, property, business, health, and professional reputation to his appetite; had considerable abdominal dropsy at the time he was put under treatment. Dr. McElroy was visited by Dr. McKinley, formerly of St. Louis, who has followed the treatment of inebriates as a specialty for many years with great success. The patient was placed under Dr. McKinley's treatment, and the case was carefully watched by Dr. McElroy.

Treatment commenced Sunday evening, December 10th, 1876. The patient was put to bed and his clothing removed from the room. He was furnished a pint of good whisky, and told to take what he desired during the night.

December 11th, morning: Pint of whisky about gone; to have another pint of whisky. During the day he drank some coffee and had eaten some ham and bread; to have mush and milk for diet. Evening: Patient still in bed; to have all the whisky he desires during the night. Dr. McKinley gave him a drachm of Howard's hydro-sublimite of mercury (simply pure calomel), dry upon the tongue, washed down with a tumbler of whisky; patient to remain in one position in bed, so far as possible; pulse very feeble; eats very little.

December 12th, morning: Patient had three copious discharges from bowels during the night; pulse good, about one hundred, skin soft and moist, feels very comfortable. At six o'clock A.M. Dr. McKinley gave him a drachm of Squibb's powdered ipecac mixed with licorice, dropped dry on the tongue, washed down with whisky. To have all the whisky he wants during the day; mush and milk diet. Evening: Has had four more operations of the bowels. Dr. McKinley gave him two scruples of powdered ipecac in the same way as the other medicine had been given. At eleven o'clock P.M. Mr. A. was desperately sick at the stomach; thought he was dying; sent for his physicians; more whisky ordered.

December 13th: He was very sick at the stomach and threw up some dark "bilious matter;" no more medicine that morning; Dr. McKinley pressed more whisky upon the patient. About ten A.M. he thought something had been put into the whisky to make him sick. A messenger was sent to his brother-in-law, who procured him a quart of the best whisky to be had, but he never tasted it. About one o'clock he requested his wife to remove all liquor out of his bed-room, as he had turned against it. He has never tasted any since; his taste for it was entirely gone, and has never returned. Evening: He ate some milk and crackers after his stomach settled; has no nausea now; had twenty-five grains of chloral in comp. spts. of lavender.

December 15th, morning: Had eight hours' sleep. Bowels continue to move, discharges more offensive; kidneys act, swelling of abdomen about the same, although there is more gas and less water. At six A.

M. Dr. McKinley commenced giving him grain doses of ipecac every hour, dropped dry on the tongue; gave him no food; although slightly nauseated all the time he did not vomit; gave the last dose of ipecac at noon; to have hot milk and cracker when his stomach will receive it. Evening: Patient improving, pulse good, bowels moved several times, no medicine; next day, 15th, losing flesh rapidly, no medicine.

December 16th: Takes hourly doses of ipecac, with one grain calomel in each of the first three doses in the forenoon; bowels moved twice.

December 17th: Abdominal dropsy all gone; patient up and dressed and down stairs; appetite good; tongue nearly normal; commences to-day to take syrup of the iodide of iron, two ounces in six ounces simple syrup, to take a tablespoonful before each meal, and to return the same amount of water to the bottle after each dose; when it becomes tasteless, to commence with the common tincture of iron, two ounces in six of syrup, and take in the same way, keeping the bottle always full by adding water after each dose.

His recovery was complete, and there has been no return of his appetite for alcoholic drinks.

Dr. McElroy's conclusion from this case, and many others reported by Dr. McKinley, are as follows:

"First, That medicine offers the confirmed inebriate relief from the trammels of appetite, with as much certainty as relief from any other pathological condition.

"Second, That what is done by specialists in the treatment of chronic drunkenness can and should be done equally well by the profession at large.

"Third, That reformation by the aid of medicine has a solid and real foundation in changes of structure on which appetite depends, which purely moral reformations lack, and are, therefore, less permanent." *St. Louis Clinical Record.*

#### TARTAR EMETIC IN BRONCHITIS OF CHILDREN.

Dr. Ringer says: There is a form of bronchitis seen amongst children, where a large number of coarse mucous rales produce loud wheezing with an asthmatic quality of cough. The wheezing is the symptom that the mother is most likely to complain of, and together with the cough, is most intense at night, both almost entirely disappearing during the day. Such cases very readily yield in my practice under the use of tartar emetic given in solution in the proportion of a grain to the pint of water. Of this solution a teaspoonful is given every one or two hours, with the best results; sometimes relieving the noisy wheezing after one or two doses.

Often in children we find a catarrh of the bronchial and intestinal mucous membranes, either co-existing or alternating with each other. When such a condition persists after the employment of the ordinary household remedies, tartar emetic in the same doses of the solution just before mentioned, hourly repeated, will check both catarrhs, without the use of further treatment.—*Medical Brief.*

#### WHOOPIING-COUGH.

English practitioners speak highly of the use of croton chloral in the treatment of whooping-cough. They claim that it has a marked tendency to shorten the duration of the disease. The dose for a child one year old is one grain every three or four hours. *Medical Brief.*

DR. SIMON (in the *Med. Journal and Exam.*) states that he instantaneously cured a case of hic-cough, which had lasted twenty-six hours, by the inhalation of three drops of nitrite of amyl. *Medical Brief.*

#### CONTAGIOUSNESS OF SCARLET FEVER.

Dr. Longhurst (*Lancet*), in answer to some questions regarding the contagious character and communicability of scarlet fever, writes that the period in which the infection is most active is the stage of inflammatory fever up to the full development of the eruption; that the intensity subsides with the subsidence of the fever; and that it is not during the stage of desquamation. That the media of communication are the vaporous exhalations from the skin and the breath affecting the surrounding atmosphere and the clothes. That the patient may ordinarily safely rejoin the family circle at the end of the third week.

#### TREATMENT OF NASAL CATARRH.

Simple as the disease appears, limited as it is to a very small region of the body, and superficial as it remains during its whole course, it has baffled all efforts at speedy cure whenever allowed to penetrate deeply into the complex and wonderful recesses of the nose and its appendages. Ten years of constant experience in the treatment of this disease has failed to bring forth an antidote, a specific cure. In that time, I have, however, succeeded in simplifying the treatment and in shortening considerably the time of its duration.

Success rests principally in the restoration of the functions of the body to a healthy standard; in giving to the blood the fibrine and red corpuscles that have been diminished through the effects of the disease; in removing the stench from the nostrils of the affected one, which has naturally been a barrier between himself and social life, depriving him of its cheerful and healthful influence. Finally, a cure is the reward of the combined efforts of physician and patient.

When the patient is anæmic, with impaired digestion, his liver torpid, I have found a combination of small doses of mercury with iron and quinine to answer very well in restoring the secretions and imparting renewed vigor.

℞. Hydr. chl. corros. .... grs. j-ij;  
Tinct. ferri. chlor. .... ʒj;  
Elixir cort. calisayæ (detan-  
nized) ..... ʒv. M.

Dose, teaspoonful in a wineglass of water three times a day, at meals. At the same time his diet should be restricted, and should consist of meats and meat-juice, milk, eggs and bread; that is, to be light, nourishing, and blood-making. With the meat and eggs some preparation of pepsin should be given until powers of digestion are restored. Out-door exercise should be strictly enforced.

In those cases where the functions of the liver are natural, but where the nervous system is enfeebled, the following combination generally suffices to restore the tone in the nervous element:

R. Acid phosph. dil. .... ʒj;  
 Ferri pyrophosph. .... grs. c;  
 Sulphatis strychniæ. .... grs. ij;  
 Elixir gentian vel cort. calisaya detannized. .... ʒv. M.

Teaspoonful three times a day in wineglass of water.

When anæmia is the most predominant symptom, in addition to one of the foregoing prescriptions, I give, for a time, a pill containing:

R. Sulph. ferri exsic. .... grs. xxx;  
 Sulph. manganes. .... grs. xxx;  
 Sulph. quiniæ ..... grs. xiv;  
 Ext. gentian. .... q. s. M.

To be made into thirty pills. Take one three times a day, at meals.

The bowels should be kept regular, and the patient's body and mind engaged in some active or recreating work.

The local treatment is always unpleasant and generally painful, and for this reason I have simplified it as much as I possibly could. In the first place, the patient should be well instructed how to use an injection, or douche, through the nostrils. (I prefer the syringe, for the reason that the force of the current can always be regulated by the patient himself). When he can open his mouth sufficiently and breathe while the current is passing from one nostril to the other, and be made to understand that all the water must be allowed to flow out of the nasal passages before breathing through them, then he can be intrusted with that part of the treatment. During a ten years' constant application of this method I have not met with a case of inflammation of the middle ear produced by an injection when used as above directed.

A solution of common salt, in warm water, has given better results than any other injection I have used. It is generally soothing, and washes out the passages very well. When this application is made three times a day, and the passages are well cleansed, no hard scab has time to form, the nauseous smell soon disappears, and the disease is checked in its progress.

When the disease is on the wane, light astringent injections may occasionally be used to an advantage. Acetate of lead, tannic acid, and sulphate of quinine may be used in weak solutions.

The patient should also be instructed how to mop the upper part of the pharynx by a tongue-depressor, if necessary, and to make local applications there

with a curved camel's hair brush or mop made with cotton-wool. For such applications I prefer a solution of chlorate of potash or of common salt where there exists much irritation, and of turpentine when the circulation is sluggish and the parts are covered with a muco-purulent secretion.

Having the patient conversant with the use of the mop, the nasal passages cleansed, and the pharynx attended to daily, the moment that these means are found to have caused a check in the progress of the disease is the most favorable time for the physician to begin the local curative applications. Of these I have found nitrate of silver to answer best, and use it almost exclusively. When a strong impression requires to be made on the mucous membrane, I use a solution of one hundred to one hundred and twenty grains to the ounce, with a very fine atomizer, washing off the parts immediately after with a solution of salt. When a stimulating influence is desired, a solution of ten to forty grains is best. Such applications should be made over the nasal passages and the pharynx once every fourth, sixth or seventh day, judging from the effects produced, until the disease is entirely cured; otherwise you will have the mortification of going back over the same routine with your patient, or of seeing him leave you dissatisfied.

The result of the above treatment will generally be as follows: The appetite returns, the coloring of the skin improves gradually, the weight of the body increases, the spirits become more buoyant, and your patient is not only grateful for the benefits obtained, but is anxious, among women especially, to carry on strictly the directions of the physician until an entire restoration to health is obtained. Men generally abandon the treatment before its completion, and the result is that while there are some who do recover, many have a return of the disease and all its unpleasant symptoms.—J. C. LeHardy, M.D., in the *Atlanta Med. and Surg. Jour.*

#### THE TREATMENT OF SLEEPLESSNESS CONNECTED WITH EXCITEMENT IN MALE LUNATICS.

In a paper reported in the *Zeitschrift für Psychiatrie* (Bd. 33, Heft 2), Dr. Wittich advocates two modes of treatment for the above form of insomnia. The first of these is the administration of bromide of potassium in doses of from six to nine grammes (about one and a half to two and a half drachms) in the twenty-four hours. This treatment is specially applicable to cases in which the symptoms appear to arise from hyperæmia of the brain. The other method employed, which is most useful when anæmia of the brain is present, is giving the patient one or two quarts of beer in the evening. Tables which have been kept in the Heppenheim Asylum show that these two plans of treatment have yielded results almost equal to those of chloral-hydrate and the subcutaneous injection of morphia. In a considerable number of cases, moreover, where the last-mentioned drugs had failed, sleep was obtained by one of the methods mentioned above.—*London Med. Rec.*, March 15, 1877.

# ON THE OPERATIVE TREATMENT OF INTERNAL PILES.

Mr. Thomas Annandale, surgeon to the Royal Infirmary, Edinburgh, holds (*Edinburgh Med. Journal*, June, 1876) the true principle of operative interference in cases of internal piles to be—to confine the operation in cases in which the disease is uncomplicated with other serious affections, has resisted ordinary treatment, and is causing disturbance to the general health or comfort, either by bleeding or by constant protrusion and irritation, or both.

The principle of the operation itself is to destroy or remove simply, effectually, and without hemorrhage, the vascular growths or masses forming the piles; and in so doing to leave a sore or sores which will heal and contract safely, quickly and thoroughly.

The advantages of the clamp and cautery (Smith's operation), as compared with the use of the ligature, the two operations at present in general use for the cure of internal piles, are, in Mr. Annandale's opinion, as follows:—

1. By means of the clamp and cautery the piles are at once removed, and do not remain in the rectum as dead and putrid masses.
2. The irritation and pain are not so severe or so prolonged as in the operation by ligature.
3. The patient's confinement to bed and to the house is much shorter.
4. The resulting sores heal more quickly, and are attended with less risk of suppuration and its attendant local and general dangers.

It so happens that I can offer some strong evidence in favour of the clamp and cautery in connection with the amount of pain and irritation following the operation, and the quickness of recovery after it—for, in three of my cases operated upon in this way the patients had previously undergone the operation by ligature. The testimony of all these patients who had experienced both methods was most strongly in favour of the clamp and cautery.

Mr. Annandale asks, Are there any risks connected with the use of the clamp and cautery? One of the principal objections which has been brought against this method is the risk of hemorrhage after the operation. If the cautery or heated knife be properly used at an almost black heat, and ordinary precautions taken after the operation, I consider that the risk is a very slight one indeed. There has been hemorrhage in only one of my cases—to which I have already referred—and there was good cause for its occurring. Is this operation entirely free from the risk of pyæmia? Cases have occurred, and have been reported, in which fatal pyæmia has followed the use of the clamp and cautery; and I myself have met with one case, which I will briefly relate.

A few years ago I operated on a gentleman æt. 50 and removed, with the clamp and cautery, three large internal piles. On the fifth day after the operation the patient was out of bed, and appeared to be progressing in every way favourably. On the sixth day he had a rigour. On the seventh day he complained of pain in his side, and symptoms of

pneumonia were present. On the tenth day he died, and evidently from acute pyæmia.

Although, therefore, acute pyæmia may follow this operation, I am strongly of opinion that there is less risk of its resulting from the use of the clamp and cautery than from the employment of the ligature. In confirmation of this, I think I am justified in stating, that experience has shown that a wound made—especially in vascular textures—by a heated wire, knife, or other instrument, in operative surgery, is attended with less risk of pyæmia and septicæmia than one made by other means, provided antiseptics are not employed—and the rectum is a situation where they cannot be satisfactorily used.

If the clamp and cautery are used for the removal of internal piles, it is very important that the cautery or other heated instrument should be carefully applied, and at an almost black heat. I have recently employed the thermo-cautery knife in two cases to cut off the piles after they have been seized with the clamp, and I have found it most simple and efficient in its application.

As is well known, internal piles are often complicated with external piles, or with a looseness or redundancy of the skin round the anus—and it becomes a point of considerable practical importance to consider how far such complication should be dealt with when operating upon the internal tumours. When distinct external piles exist along with internal ones, there can be no doubt that the proper practice is to cut them off at the time of operating upon the internal tumours; but when the condition is simply a general looseness of the skin surrounding the anus, then I think that it should not be interfered with, unless it is very marked. I have seen very troublesome results from the too free removal of such skin, which, when the internal piles are protruded seem more redundant than it really is. The plan I myself follow is to carefully examine the external parts after the internal piles and any prolapsed mucous membrane have been thoroughly pushed up into the rectum. If then well marked external piles or any very redundant folds of skin are present, I consider it a proper case in which to cut them off; but, if the looseness or folds of skin are not aggravated, it is better not to interfere with them.

In conclusion, and as a result of my experience, supported by the facts detailed, I would offer the following opinion in regard to the ligature *versus* the clamp and cautery: That although internal piles may be successfully removed by the ligature, their removal by the clamp and cautery is much to be preferred.

## THE DEEP INJECTION OF CHLOROFORM.

Drs. Hall, Curtis, and C. E. Stedman, of the Boston City Hospital, have recently reported in the *Journal*, a number of cases of sciatica, in which the treatment by the deep injection of chloroform, first introduced by Bartholow in a case of infra-orbital neuralgia, was used with marked success.—*The Boston Medical and Surgical Journal*, Aug. 30, 1877.

## DANGEROUS PRESCRIPTIONS.

Some cases are mentioned in our exchanges in which corrosive sublimate has been dispensed for calomel in consequence of either prescriber or dispenser being unable to follow the changes which have been made in the nomenclature of these two chlorides. We have always doubted the propriety of a Pharmacopœia attempting to follow the shifting views of chemical theory. A name for a drug need not be chemically correct. A worse case is reported in which *hyd. chlor.* was written by a physician who intended it for hydrate of chloral. Corrosive sublimate was dispensed, and the patient nearly killed, life being saved by vomiting occurring immediately on swallowing the poison, and timely aid. A critic who pronounces the physician's act a blunder, and the dispenser's worse, says the rule should be religiously observed never to abbreviate those words, but write in full, *hydratis chlorali*, or else put it in English. Now the word *chloral* is not declinable in Latin, and should, moreover, precede *hydratis*. Its proper position would render such another blunder less likely, and should, therefore, be assigned to it.—*N. Y. Medical Record*.

## CHROMIC ACID IN THE TREATMENT OF ULCERATING GRANULATIONS OF THE OS UTERI.

In the *Annales de la Société de Médecine de Gand*, M. Kœberle prefers chromic as a cauterising agent to the other remedies usually used, as pernitrate of mercury, iodine, nitrate of silver, and the actual cautery. He uses it in the crystalloid condition. It is a very anhydrous substance, and readily absorbs the moisture from the tissues which it may touch. M. Kœberle applies it through an India-rubber speculum on a tampon of cotton-wool. Vomiting often supervenes within fifteen or twenty minutes from the application of the acid. When the tissues are seriously altered, it is necessary to repeat the cauterisation, but M. Kœberle has hitherto found three applications to suffice. After the application he applies a tampon, and advises the patient to use two soap-and-water injections daily. He treats all ulcerations of the os in this way, as in epithelioma.—*London Med. Rec.*, March 15, 1877.

## CHROMIC ACID FOR WARTS.

Three or four applications of this acid will cause the disappearance of warts, however hard, large, or dense these may be. The application gives rise to neither pain, suppuration, nor cicatrices, the sole inconvenience being the production of a dark brown color.—*L'Union Médicale*, April 22, 1876.

The use of iodine is sometimes objected to on account of its staining the skin. It is not generally known that a very small quantity of carbolic acid will render this agent colourless without destroying its therapeutic properties.

## RECOVERY AFTER TAKING EIGHTY GRAINS OF TARTAR-EMETIC.

Mr. F. Mason, Bath, England, reports, in the *Brit. Med. Jour.*, a case of a laboring man who took, by the mistake of a prescribing druggist, eighty grains of tartar-emeti. No very serious results followed, but the use of tannin and emetics was resorted to, followed by decoctions of cinchona. The patient had been suffering with diarrhœa for several weeks, and seems really to have been benefited rather than made worse by the rough treatment he experienced.

## MIGRAINE.

In order to alleviate pain in the course of an attack of migraine, or to cut it short at the commencement Delieux recommends the juice of lemon to be squeezed into a cup of coffee without milk or sugar, and drunk off at a draught.—*Med. Times and Gaz.*, Aug. 25, 1877.

## THE STRUCTURE AND GENESIS OF CHALAZION.

Dr. Vincentis, of Naples, (abstract in *Annales d'Oculistique*, Nov.-Dec., 1876, finds that chalazion is composed of giant-cells and an enveloping capsule. The capsule is not simple, but formed of two parts, of which one envelopes the greater part of the tumour, and the other is accessory to the cartilage. The tumour also is composed of two parts, a central, homogeneous in character, and an external, consisting of small masses separated from one another by connective tissue. The origin of a chalazion lies in the inflammation of a Meibomian follicle, and the giant-cells spring from the epithelium of the Meibomian gland.—*London Med. Rec.*, March 15, 1877.

## DRY DRESSING.

THE days of water dressing have been numbered by antiseptics, and these latter are now threatened just as ointments were by water. Mr. Robert Hamilton, of Leeds, has contributed an interesting paper to the *Lancet* (5th May) on the advantages of the "anhydrous dressing of wounds," in which he endeavours to show that water should not be permitted to come near any wound, and that the exclusion of this agent is the real cause of much of the success which has attended Lister's method, and the almost equally good results obtained by the use of our old friend "Friar's balsam." Mr. Hamilton believes that in so far as we can keep an abraded surface free from all external agencies, just so far shall we succeed in facilitating the healing process. He holds, too, that amongst the external agencies which are injurious water is worse than the atmosphere. His hope for the future is in the avoidance of heat and moisture. Certainly the results that in so many cases follow the use of dry lint or cotton wool on small wounds, especially scalp wounds, support the idea, which will further be acceptable to those who have witnessed the success of the popular applications of some nap from a silk hat,



burnt rag, tobacco, and other substances which are often used by the public.

Dr. T. R. Fraser succeeds Sir Robt. Christison to the Chair of Materia Medica in the University of Edinburgh.

#### FORMULÆ FOR THE TREATMENT OF SCROFULOUS OZÆNA.

M. Ory, (*La France Méd.*, 1877, p. 387) gives the following formulæ. He remarks that scrofulous ozæna is an affection peculiarly painful and annoying, both to the patient and those who surround him. In order to combat the odor, Trousseau was accustomed to employ one of the following powders:

1. R Bismuth. subnit.,  
Talc. venetian., aa 3 iv.—M.
2. R Potasii chlorat., gr. xxx;  
Sacch. alb. pulv., 3 iv.—M.
3. R Hydrarg. præcip. alb., gr. iv;  
Sacch. alb. pulv., 3 iv.—M.

He recommends that the nasal fossæ should first be thoroughly cleansed, and all crusts, etc., removed. Debout prescribes:

- R Bismuth. subnit., 3 iv;  
Potassii chlorat., gr. xvj.—M.

He also recommends the use of sulphur waters together with cod-liver oil and arsenic internally. Percy recommends injections for the nose:

- R Tinct. iodinii, ℥ xlv;  
Acid. carbolic., ℥ vi;  
Glycerinæ f 3 i;  
Aq. destillat., f 3 v.—M

The proportion of carbolic acid may be increased. Gailleton urges the use of solutions of common salt—one pint of salt to one hundred pints of water—by way of injection.

These injections should be abundant, and should be made with the aid of the nasal douche, the nasal passages being thoroughly cleansed by passing several quarts of water through them two or three times a day.

Lailler, besides the use of general treatment, is in the habit of employing injections with the following solution:

- R Chloral hydrat., 3 iss;  
Aquæ, f 3 ii.—M.

The repulsive odor of ozæna is likewise happily neutralized by dilute solutions of hypochlorite of sodium. The following formula containing pix may also be employed:

- R Sodii carb. cryst. pulv., gr. xvi;  
Picis liq., gtt. xvi;  
Aquæ, f 3 ii.—M.

Davy recommends the following astringent injection:

- R Tannin, gr. iss,  
Glycerinæ, gtt. xxx;  
Aq. destillat.,  
Aq. rosæ, aa f 3 ss.—M. x.

#### SUBCUTANEOUS INJECTIONS IN HÆMOPTYSIS.

Dr. Jos. Hirschfeld (*Wien. Med. Presse*, 1877, p. 724) alludes to the various methods used to combat bleeding from the lungs. Cold acts reflexly in contracting the vessels and restricting their lumina, and thus aids the formation of a thrombus. Swallowing bits of ice is preferable to the external application of cold. Whatever be the therapeutic means employed, it is aided by deep inspiration and holding the breath, on the patient's part (except when the bleeding occurs from a cavity). The compression exerted by the forcibly inspired and retained air exercises undoubtedly a certain pressure upon the vascular walls and the gaping wound. With this object, Hirschfeld causes the patient to suck a cooling drink, slowly, through a glass tube. The forced inhalation of astringent medicines has not succeeded so well as was expected. Where it has acted well, this is probably because of the deep inspiration accompanying. Styptics, like alum, acetate of lead, tannin, chloride of iron, etc., which reach their destination only after digestion, are of little value, and not unfrequently upset the stomach. Among narcotics, digitalis is most important; in increased cardiac action, and particularly in cases where an uncompensated cardiac deficiency is at the bottom of the trouble, it is a useful though slowly-acting remedy.

The sovereign agent in hæmoptysis, however, is ergotin, which, as is known, acts as a vaso-constrictor. For this use of ergotin we are indebted to Drasche, who recommended its hypodermic use in 1871. Aside from the rapid and active action of this agent, when employed in the manner mentioned, every physician knows how difficult it frequently is to get a patient suffering from hæmoptysis to take anything by the mouth: a remedy which can be kept always ready and can be administered hypodermically is therefore a prize. Ergotin is best administered in glycerin solution (1 to 10). After the injection considerable sensitiveness exists about the puncture, followed by a sensation of warmth, and slight reddening, which disappears in the course of eight or ten hours. It is well known that patients who suffer from repeated attacks of hæmoptysis are found in a condition of marked psychological excitement, since they well know the risk they run. This psychological disturbance allows the patient to rest with difficulty or not at all: this rest is, however, very necessary, if the hemorrhage is to be controlled. In addition, there is also the irritation of the blood poured out, which is loosened by repeated attacks of coughing, thus keeping up the hemorrhage and preventing the closure of the vessel by a thrombus. In order to avoid this, H. is accustomed to precede or accompany the ergotin injection by one of morphia. Under the influence of the latter, rest and the resultant quiet of the parts ensue, and the ergotin is enabled to exercise its hæmostatic influence to the best advantage.

## RICORD'S COUGH PILLS.

|                             |               |
|-----------------------------|---------------|
| Morphiæ hydrochloratis..... | gr. v;        |
| Extracti hyoscyami .....    | gr. viij;     |
| Rad. belladonnæ pulv .....  | } aa gr. xlv; |
| Rad. glycyrrhizæ pulv ..... |               |
| Mellis .....                |               |
| Balsami toluani.....        | gr. lxxv;     |
| Ol. theobromæ .....         | gr. lxxv.     |

Make into one hundred pills. Each contains one-twentieth of a grain of hydrochlorate (muriate) of morphia.

Dose—One pill every five or six hours, in chronic bronchitis accompanied with cough.—*New Remedies*.

## THE ELECTRICITY OF THE HUMAN BODY.

It has been long known from positive and conclusive facts that the human body is charged with electricity in the high altitudes and excessively dry atmosphere of the plateaux of the Sierra Nevada and Rocky Mountains. But it is not so generally known that the accumulation of this electricity may cause very great danger to persons carrying explosive substances.

Two grave and distressing accidents occurred a few months ago at the entrance of the Sutro tunnel, both occasioned by the sudden explosion, in an incomprehensible manner, of a quantity of priming powder in percussion cases.

In the first instance, Mr. Henry L. Foreman, a man of high culture, a former attaché of the telegraphic service at Washington, was examining the cases when 200 of them exploded, blinding and dangerously wounding the unfortunate man. The cases were large copper priming capsules for cannon, each an inch long, charged with fulminate of mercury.

The second accident occurred only a few weeks ago and almost under the same circumstances, at the same place, whereby Thomas Coombs lost his hand and a part of his left arm. He was engaged in packing away ten of these cases, when all at once, and without apparent cause, they all exploded, mutilating their victim so cruelly as to render necessary immediate amputation.

These accidents led M. Sutro to undertake a series of experiments with a view of determining seriously the cause of the inexplicable explosions. This investigation has led him to believe that they were due to electricity disengaged from the human body, and it was to confirm this idea that he commenced his experiments.

The experiments were made as follows: Having insulated a package of cases upon a piece of carpet, he connected with them metal wires of length sufficient to remove the operator from all danger. He now walked up and down the chamber a few minutes and then held a knuckle to the end of the wire, whereupon an explosion followed at once.

This experiment was repeated a number of times with different explosive apparatus, such as those employed by the San Francisco Company, and those of the Electrical Construction Company, and always

with the same results. They go to prove that explosive machines may be discharged by the electricity accumulated in the human body.

Instructions were therefore given to the entire *personnel* of the tunnel. All the men were furnished with boots which were conductors of electricity, and were ordered to wet the boots before entering the tunnel where the explosive material was placed. By taking thus this simple but highly scientific precaution a repetition was prevented of the accidents which rendered Messrs. Foreman and Coombs victims for life.—*La France Medicale*, June 13, 1877.

## IN ANAL FISSURE.

Trousseau recommended both the tincture and extract of rhatanny in fissure of the anus, a drachm of each in five ounces of water, by enema. In prescribing the remedies glycerin will be found a convenient excipient; as

|                          |          |
|--------------------------|----------|
| R. Tinct. krameriæ ..... | ʒij;     |
| Ext. krameriæ.....       | ʒij;     |
| Glycerinæ .....          | ʒiij. M. |

S. A tablespoonful in a tumblerful of water by injection.

## HYDROBROMIC ACID.

Edward Woakes, M.D., Surgeon to the Throat Hospital, London, writes to the *British Medical Journal*: This drug having established its claim to antagonize the ear symptoms occasioned by large doses of quinine, there appears to be but one step between this fact and the inference that it should be equally efficacious in analogous states of the ear arising from other causes. Viewing certain forms of tinnitus as possessing marked analogy to the condition induced by quinine—one, that is, of congested labyrinthine circulation—I have prescribed certain remedies with a view to the relief of this most distressing symptom; among these codeia, with some advantage, but not in any degree comparable to the results attending the hydrobromic acid. It may be needless to remark that the cases should be selected with a view to their appositeness to the presumed physiological action of the drug; and the indication which should be regarded as most distinctly pointing in this direction is that the noises have more or less of a pulsating, or, as the patient will describe it, a "knocking" character. The existence of vertigo, if present, will rather confirm the indication for the exhibition of the acid. The subjoined cases are intended to illustrate these remarks, and are taken from a number of others under recent observation.

F. C., aged twenty-four, was the subject of otorrhœa media, associated with tinnitus of a very distressing character. This latter symptom persisted long after the others had yielded to treatment. The patient, a fairly intelligent mechanic, described the noises as increased on lying down, when they became "like the knocking of his heart." He was ordered fifteen minims of hydrobromic acid in water every

four hours. At his next visit he stated that, after taking three doses, the noises had much diminished, an improvement which steadily continued, so that at the end of a week he considered himself well.

J. T., a chorister, aged thirty-three, presented an acutely inflamed condition of the lining membrane of the middle ear, which projected through a large central perforation of the drumhead. The external meatus was red and tender in its deepest portion, and near the membrane were two granular polypoid growths. There was abundant otorrhœa, of a very foetid description. After removal of the growths from the external canal, the subsidence of the inflammatory state of the tympanic cavity, together with the discharge, he still complained of pulsating noises in the head, increased by walking or stooping, headache and occasional giddiness. The hydrobromic acid was given, as in the previous case, with an equally rapid disappearance of all the symptoms associated with the tinnitus.

Two points appear important to secure the success of the drug. 1. The auditory apparatus must be clear of any well marked objective morbid process. 2. The tinnitus should present the characters of congested blood-supply, already alluded to. In mentioning the foregoing facts at a recent discussion at the Harveian Society, owing to the lateness of the hour, the distinctive indications for the successful administration of the drug were not insisted upon, an omission which, I trust, this communication will sufficiently rectify.

#### A NEW MUCILAGE.

The *Journal de Pharmacie* states that if, to a solution of gum-arabic, measuring  $8\frac{1}{2}$  fluid ounces, a solution of 30 grains of sulphate of aluminum dissolved in two-thirds of an ounce of water be added a very strong mucilage is formed, capable of fastening wood together, or of mending porcelain or glass.

UNDER the head of "Honors to an American," the *St Louis Clinical Record* makes the following very severe statements, which, if true, ought to be generally known, and, if not true, ought to subject the editor of the *Record* to damages for libel:

"Several of our contemporaries are giving great prominence to Dr. Sayre's very flattering reception in England. It seems that Dr. Sayre went to England to advertise his (*sic*) method of treating spinal curvature. He intends to publish a book describing his (?) processes, and expects a large sale under an English copyright.

"This would be all very well—in fact, just as it should be—if Dr. Sayre had ever invented anything, which he never did, so far as we are informed.

"Dr. Sayre's hip-joint splint' was invented by Dr. Davis.

"Dr. Sayre's plaster-of-Paris jacket' was invented and first applied by Dr. Bryan, of Lexington, Kentucky.

"Dr. Sayre's method of self-suspension in rotary-lateral spinal curvature' was invented by Dr. Benj. Lee, of Philadelphia.

"Dr. Sayre's lectures on orthopædic surgery' were by Dr. Louis Buer, formerly of Brooklyn, New York, now of St. Louis.

"As a plagiarist and 'father of other men's ideas,' Dr. Sayre is without a rival. We are glad to see that our English cousins delight to honor such representative Americans (Heaven save the mark!) as P. T. Barnum and L. A. Sayre. *Vive le humbug!*"

#### INSOMNIA AND ITS TREATMENT.

In the numbers of the *Archives Générales de Médecine* for May and June, 1877, appears an article on this subject, by Dr. Willemin. It consists of a careful compilation of the views of different writers on insomnia. The question is treated under three heads—1. The Physiology of Sleep; 2. The Causes of Insomnia; Treatment of Insomnia. The general conclusions from the whole article are as follows.

1. Sleep is the result of a diminution of cerebral cell activity, induced by the fatigue or exhaustion following mental or bodily exertion. These physical conditions modify the vasomotor system; the afflux of blood to the brain is reduced, and a condition of temporary anæmia takes place. The cerebral activity is thus diminished, and sleep follows, during which the nervous elements are repaired.

2. The cause of insomnia is a persistent abnormal activity of the cerebral nervous elements, due to some internal or external irritation. It may also be due to active congestion of the brain, which causes abnormal functional activity of its cellular substance.

3. Insomnia may also be the result of a peculiar nervous condition, associated with general anæmia, in which, owing to changes in the nervous elements, there is a modification in the circulation of the brain.

4. In the treatment of insomnia it is important to first ascertain its cause. Slight cases are usually successfully treated by general hygienic measures.

5. Insomnia occurring during acute or chronic maladies cannot, as a rule, be rapidly relieved. Therefore, while waiting the recovery of the disease, the symptom is to be treated with hypnotics, at the head of which is opium and its alkaloids.

6. Morphia is the most somniferous principle of opium. Narcein and codeine, although less active in this respect, leave fewer traces of headache and malaise. Opium preparations are more particularly useful in insomnia associated with pain. They are contra-indicated when there exists any cerebral congestion.

7. Bromide of potassium has a much less powerful hypnotic action than opium. Its use is indicated in those cases due to excitement of the cerebral circula-

tion, in which opiates are useless and injurious. It has been employed successfully as a calmate in children. It is contra-indicated in cases of marked anæmia.

8. Sulphate of quinine, like the bromide, appears to exercise the action of relieving the congestion of the cerebral nervous elements.

9. Hydrate of chloral is an excellent hypnotic in almost all cases of insomnia, but it is to be given with caution to persons suffering from dyspnæa, cardiac affections, or great debility.

10. The insomnia of old persons or patients suffering from great debility or anæmia is sometimes successfully treated by tonics, stimulants and hydro-pathy.

#### THERAPEUTICS OF TETANUS.

An anonymous writer in the *Practitioner* for August gives an interesting retrospect of the medical treatment of tetanus, from which we extract the following notes:—*Chloroform* has had an extensive trial; it has been administered in large quantities, sometimes with apparent success. Simpson narcotised a child for thirteen consecutive days, using  $\frac{3}{4}$  100 with mercury. But the general result is that while all the fatal symptoms disappear on the inhalation of chloroform, they return on its removal with unabated violence, and the disease generally lands them to its fatal conclusion without delay. *Chloral hydrate* has now taken the place of chloroform in the treatment of tetanus, but without more success. There appears to be great tolerance of the drug, and a case is quoted of a child of  $12\frac{1}{2}$  years who took more than 100gr. a day. Dr. Ballantyne, of Dalkeith, gave  $\frac{3}{4}$  iij. in twenty-four hours, and  $\frac{3}{4}$  vj. in five weeks, with success, the patient during this time being easily aroused to speak. It seems, however, to be a valuable drug in alleviating the symptoms. Its injection into the veins and its subcutaneous injection have not been so successful. *Calabar bean*, which, like chloral, affects the spinal chord, and has little or no action on the motor and sensory nerves, has been recently much employed. As with other drugs, its administration has been at one time apparently successful, and at another a perfect failure. It has, moreover, to be given in comparatively large doses. The spasms are controlled and the body heat sinks, and if the drug be withheld the paroxysms return, while if it be pressed the patient comes into a somewhat dangerous condition. A large dose is required to produce by subcutaneous injection contraction of the pupil, sometimes as much as  $\frac{1}{2}$  gr. every two hours. There is not much to be said in favour of either *opium* alone, or opium combined with chloral; while *nitrite of amyl*, *bromide of potassium*, and *conium* have been alike tried in vain. A more favourable report is given of *aconite*, the exhibition of which has been attended in some cases with remarkable results. It lowered the pulse, which fell in one case from 135 to 60, with a simultaneous decrease of the convulsions; but the effects of the drug constitute in themselves a new danger which must be carefully controlled. Tendency to syncope, wakefulness, vertigo, dilatation, and insensibility of

the pupil; small, intermittent, and irregular pulse, and increased irritability of the nervous system are often the result of giving this remedy. The writer of the article referred to believes that such a summary as he has given makes an appeal to pathology to throw fresh light upon this disease, and he hopes that some combination of these agents will be able to accomplish what each one of them singly has been found unable to accomplish.

We have no doubt that we shall one day find a remedy that is as really successful in the treatment of tetanus as the bromide of potassium has been found to be in some forms of epilepsy; but just as we are not indebted to pathology for the discovery of the therapeutic virtues of the bromide in epilepsy, so we are far from being sanguine that pathology will point out by-and-by the drug or combination of drugs which will cure the disease under consideration. In all probability the chemist or the botanist has already provided the remedy; and perhaps it remains for empirical experiment, rather than for physiology or pathology, to find it out.—*Dublin Medical Press*.

#### ON RUPTURE OF THE MEMBRANES IN LABOR.

Dr. William Stephenson, Professor of Midwifery in the University of Aberdeen, in an article in the *British Medical Journal*, proceeds to discuss the diagnosis of the conditions which warrant us in having recourse to rupture of the membranes before the full dilatation of the os. The first point is the determination of the degree of expansion of the lower uterine segment. We have seen that the size of the external os is no criterion of expansion. The os, in fact, may be very small, and yet expansion may be complete. It is by the internal os that we can best judge, but this is hard to reach, and difficult to determine its exact site. There is one means, however, of ready access, whereby we can form a proximate opinion; it is the degree of dilatation or updrawing of the vaginal cul-de-sac. This is a point which has been entirely left out in the consideration of the first stage. It is a matter of common experience to find, in the class of cases where we feel something is required to promote a labor with tardy dilatation of the os, that the upper part of the vagina is well expanded and drawn up, greatly increasing the perceptible diaphragm of the cervix, which alone obstructs the continuity of the developed canal. Now, we know that the longitudinal muscular fibres of the vagina run upward, and are continuous with those of the body of the uterus, and that the attachments of the uterus in their upper portion correspond with the internal os. This portion, then, cannot undergo expansion without carrying with it the tissues which are in connection therewith. Consequently, we find that, as the first stage of labor advances, the upper part of the vagina is dilated until it seems to coincide pretty closely with the upper part of the bony canal. When, therefore, a considerable portion of the lower segment of the uterus can be felt in the vagina, and not merely through its walls, expansion is certain to be com-

plete, whatever may be the size of the parturient ring; and the tissues composing it are those of the cervix proper, and not the uterus. Under such circumstances, I believe the membranes may be ruptured with advantage. It is, however, unnecessary, in many cases, to wait for the full development of the condition above described. I have taken the extreme state as being most readily understood, and indicating the direction in which our observations should be made.

Another class of cases, or it may be only an additional character to those of the first, are where the action of the uterus seems to be effecting, not steady dilatation, but extreme thinning of the tissue of the cervix; and also where the head is felt to be in close contact with the parturient ring, there being little or no bag of waters.

The next point to be considered is the quantity of liquor amnii; not the actual quantity, as is generally referred to when speaking of it being present in excess, but the proportion its amount bears to the size of the child, and also to the capacity of the amniotic sac. This latter is rarely quite filled; otherwise, it would remain much more tense than it usually does in the intervals between the pains. If it be nearly or entirely distended, it will interfere with the power of restitution of form, by preventing alteration in the form of the uterus, and consequent action on the fœtus, even though the actual quantity of waters is not greater than ordinary. In this circumstance, it must be regarded as really in excess, quite as much as where there is excess in actual quantity. Undue tension, therefore, of the membranes during a relaxed state of the uterus must be regarded as unfavorable to the mechanism of labor, and as warranting an earlier rupture of the membranes than under other circumstances.

The liquor amnii must also be considered in excess, irrespectively of actual quantity, if it be unduly great in proportion to the size of the child. Here, again, it interferes with the action of the force which restores form, or the axial force. If, therefore, the parts of the child be not recognizable externally with ordinary facility during a relaxed state of the uterus; if ballottement be unusually facile, and especially can be felt during a pain, the probability is that there is a true excess of liquor amnii; and this condition would fully warrant the rupture of the membranes before the full dilatation of the os; the other conditions being favorable to the operation.

#### THE TREATMENT OF MALIGNANT PUSTULE.

Bompaire has frequently observed anthrocoïd affections amongst the numerous tanners living at Millau (Aveyron). He recommends, in the *Montpellier Médical* for January, 1877, the following treatment: 1. In slight forms of malignant pustule, when the surgeon has been called in at the beginning, a simple cauterization with Vienna paste is sufficient, and Dr. Bompaire believes that it stops the disease in the majority of cases. 2. When the tumor has acquired a certain development, when the general symptoms

have shown themselves in the usual way toward the fourth or fifth day, cauterization should be preceded by a crucial incision through, as far as possible, the whole depth of the slough. 3. Finally, when medical assistance has been called in late, when the malignant pustule has reached the seventh or eighth day, and œdema has invaded a large surface, action must be taken even when the general symptoms are very serious, and life itself seems in danger. Observation shows that, in these cases, the excision of the slough, combined with vigorous cauterization with sulphuric acid, may be of great service and save the patient. Antiseptics, such as carbolic and salicylic acid and tonics, should be administered internally. — *The London Medical Record*, July 15, 1877.

## THE CANADA MEDICAL RECORD & Monthly Journal of Medicine and Surgery.

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### OUR SIXTH VOLUME.

Our present issue is the first number of our sixth volume. We enter upon it in the hope that the revival in business, which is said to be taking place, may be felt by ourselves, for we are free to confess that the past year has been a hard one with us. Regularly every three months we have had to pay the printer; but very few, comparatively, of those to whom we believe we have been, during the year, a welcome visitor, have sent us any of the needful, to assist us in doing so. We have had to draw upon our private resources, and, to-day, the *Record* is very considerably in our debt. Now this should not be. Our subscription list is quite large enough to cover the entire cost, and, with a view of ensuring prompt payment, we have placed its subscription at the lowest possible rate. If, however, some subscribers must have from one to four years' credit, and we must pay for our work what is equivalent to cash, no other recourse is left open to us but to increase the subscription rate to those who are thus dilatory. We have, therefore, altered the terms of our subscription as follows: To all who pay for the *Record* previous to the end of the volume, the price will remain as now, two dollars a year, after that it will be charged at the rate of three dollars a year. These new terms will only take



effect from the present volume; old arrears will be collected at the old rate. We enclosed accounts in our last issue to, we believe, nearly all our subscribers. Will they kindly remit at once. The amount due by each is not very large, but when we say that in the aggregate, they foot up over two thousand five hundred dollars, its importance to us will, perhaps, be better understood. We have another favor to ask of our patrons. We have good reason to believe that, as a rule, our *Record* is well liked, and its monthly visits are looked forward to with pleasure. Have we not reason to think so, when the following extract from a subscriber in the Eastern Townships is, in substance, what we have very frequently written to us from every portion of the Dominion: "There is only one fault with your periodical. It is only half as large as it ought to be. It is just what a man like me wants. It is practical." Now, much as we would like to enlarge the *Record*, we cannot do it with our present subscription list, but if our circulation was doubled, then something could be done in that way. That it is quite possible for this to be accomplished, we are certain, if our subscribers would make but a little exertion on our behalf. There are but very few of them who could not induce one fellow-practitioner to take the *Record*, some could induce more; we know this to be the case, for a friend and subscriber to whom we made the suggestion, has, since the issue of the last number, sent us five new names, which he says he got with great ease. Will our subscribers take the hint, and act upon our suggestion. We believe the *Record* to be worth recommending, and feel satisfied that any subscriber willing to do so can do it with a clear conscience. Let the next month show a large increase in our subscription list.

#### BACK NUMBERS.

We have a few copies of each number of Volume I. still on hand. Any subscriber wishing to complete this volume, should do so at once, as our supply will soon be exhausted. Price 30 cents each copy. Copies of Volume II. can also be had, price 25 cents each copy. Single numbers of Volumes III, IV, and V, can be supplied at 20 cents. Remittances may be made in postage stamps. These rates will only hold good for the next six months, as far as volumes I and II are concerned.

#### THE SPECIMEN-COPY MAN.

We most heartily endorse the following editorial, from the editor of the *Detroit Medical Review*, for the current month. His experience has been a counterpart of our own. Within the past year New Brunswick has been most prolific in this demand, and we confess that we did not fully see through the swindle until somewhat recently. We were then forcibly struck with the somewhat singular fact, that the order for a specimen copy was often repeated from the same place, but from a different person, so far as name was concerned; but investigation proved that the writing was by the same hand. We will, in future, only send specimen copies when twenty cents in postage stamps is remitted. We will, however, send our present number to all those "specimen-copy men" whose orders are still on file, so that they may know that medical publishers are alive to their little game, which is now quite played out.

"With its occasional amenities the position of editor of a medical journal, like most other avocations in life, has its vexations, and among these few are more irritating than the perennial applicant for specimen copies. Very seldom does a mail reach us wanting the missive whose device is "Please send me a specimen copy of your valuable journal." Earlier in our journalistic experience we were wont to allow ourselves to be flattered by these requests, coming, as they do, from all parts of the compass, and from regions remote. We laid the flattering unction to our soul that we were becoming "extensively and favorably known" to the profession. It did not take us long however, to become convinced that we were being imposed upon, and that the specimen-copy man was a fraud of the first water. We have yet to have our heart made glad by a dollar of the specimen-copy man's money, and the conviction has become most thoroughly grounded that the individual is the meanest kind of a dead-beat, and the only thing we regret, in this connection, is our inability to communicate to every member of the genus our opinion of him."

"We suspect strongly that our contemporaries are contributing to the propagation of this nuisance from the fact that it has latterly been assuming more alarming proportions. Times are hard, but even the specimen-copy man feels his need of a journal, and with the aid of a package of postal cards (he was never known to send a postage stamp for return postage) he seeks to lay in his stock of periodicals. Unless he met with encouragement from some quarter we cannot

but think that even his audacity would wear itself out. Let there be a general shutting down on this nuisance that it may soon be exterminated from the land."

#### COLLEGE OF PHYSICIANS AND SURGEONS OF THE PROVINCE OF QUEBEC.

The first meeting of the new Board of Governors of the College, elected under the new Medical Act, was held in the Medical Department of Laval University, Quebec, on the 26th and 27th of September. There was a large attendance of the Governors, some thirty-six being present. Owing to the steamer *Montreal* not arriving at Quebec till after mid-day, the meeting was not regularly organized till three o'clock in the afternoon, when Dr. Rottot, president, took the chair. After some routine business the Board took up the series of by-laws which the Committee, appointed for the purpose, had reported. The consideration of them occupied the Board till nearly one o'clock on the morning of the 27th, when the Board adjourned. At half-past nine it re-assembled, and sat until half-past three o'clock without recess. The by-laws to be submitted for the approval of the Governor in Council, and which were gone through on the previous day, were adopted *en bloc*, and the President was authorized to have them prepared and transmitted to the proper quarter for endorsement. Medical assessors were appointed as follows:—For *Laval University*, Drs. Marsden and Wells, of Quebec; *Victoria College*, Dr. Angus Macdonnell, Montreal, and Dr. F. Painchaud, sen., Varennes; *McGill College*, Hon. Dr. Church, Aylmer, and Dr. P. E. Mignault, Actonvale; *Bishop's University*, Dr. J. B. Gibson, Dunham, and Hon. A. H. Paquet, St. Elizabeth. The report of the Treasurer was also received and adopted, and a new tariff (which when sanctioned by the Governor in Council will be legal) for the cities of Quebec and Montreal, as well as for the country, was decided upon, and ordered to be printed and distributed to members of the profession. Three sub-committees for the examination of candidates to be admitted to practice were appointed as follows:—First sub-committee—*anatomy*, Dr. Lemieux; *surgery*, Dr. Fenwick; *medical jurisprudence*, Dr. F. W. Campbell. Second—*physiology*, Dr. H. Pelletier; *practice of medicine*, Dr. Worthington; *materia medica*, Dr. E. Laberge. Third sub-committee—*chemistry*, Dr. M. J. Ahern; *midwifery*, Dr. L. Tetu; *botany and hygiene*, Dr. M. G. Badeaux. A notice of motion was made to the effect that at

next meeting the Board will apply to the Legislature for permission to have a code of medical ethics. Another resolution was adopted, increasing the fee for the College's license to practice from \$10 to \$20. The following graduates, on presenting their diplomas, received the license of the College to practice: Drs. Bissett and Shepherd, McGill College; Dr. Henchey, member of the Royal College of Surgeons, London; Dr. Toupin, Victoria College, and Drs. Bourbonnais, Gregoire, Antoine Belleau, Lacoursière, A. Latellier de St. Just, and A. Larochelle. The holders of American degrees presented a petition to the Board to be admitted to the examination of candidates to be licensed for practice, when it was resolved "That all persons from recognized colleges outside of Her Majesty's Dominions, who desire to obtain the license of the College, must pass before the matriculation examiners of the Preliminary Examination Board, or furnish satisfactory evidence of having passed an equivalent preliminary examination, and also attend one full six months' course of lectures in some one of the existing medical schools of this Province, and such other course or courses as may be necessary to complete the curriculum required by the Board, and shall pass the professional examination before the Provincial Medical Board. Such persons may enter for such professional examination immediately after having passed their preliminary examination." Another resolution, was adopted, authorising the President of the college to take legal proceedings against all unlicensed midwives in parishes where there is at least one medical man.

#### McGILL MEDICAL SOCIETY.

This is a society organized by the Medical Students of McGill, which has done a good work among them. Weekly meetings were held from early summer to the end of July, at which readings and papers on medical subjects were given by the members. At present, and during the winter session, the meetings are held fortnightly. Societies of this kind are capable of doing much good, so we hope the professors of McGill will encourage it.

#### THE MONTREAL MEDICAL SCHOOL.

The various Montreal Medical Schools opened on Monday, October 1st. The introductory lecture at McGill University was given by Professor Osler in the forenoon of that day. At Bishop's University, Professor Kollmyer gave the Introductory, and here an

innovation was made in the time of the lecture, it being delivered in the evening. The result was a very large attendance of the general public. At Victoria College, we understand Professor Peltier opened the course. The attendance of students at each school, so far as we can learn, is about the same as last year.

#### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

The Annual Meeting of this Society was held in the rooms of the Natural History Society on Friday evening, October 19th, when Dr. Fenwick, the President, delivered a brief address on his retiring from the Presidential chair. A vote of condolence to the family of the late Dr. Cline, who during the past year had been Secretary to the Society, was carried,—the mover and seconder of the resolution expressing their deep sorrow at the sudden removal of one with such bright prospects before him. The ballot for new officers then took place with the following result:—President, Dr. Francis W. Campbell; 1st Vice-President, Dr. Henry Howard, (Medical Superintendent of Longue Point Lunatic Asylum); 2nd Vice-President, Dr. George Ross; Treasurer, Dr. Alexander Proudfoot, (re-elected); Council, Drs. Fuller, Roddick and Bell. The Treasurer made a report showing that the Society was in a sound financial position.

#### UNIVERSITY LYING-IN HOSPITAL, MONTREAL.

We have received the Thirty-third Annual Report of the above institution, which was submitted to the subscribers on the 29th of June last. The number of patients admitted during the year was 108, of this number 26 were married and 82 were single. Forty-one students availed themselves of the facilities afforded by the hospital, for instruction in midwifery. There was not any death during the year. The expenditure was \$2,139.27, and the receipts falling slightly short of this sum, the treasurer drew to a small extent upon the Building Fund. This is, considering the great financial depression, a very good statement, and the result of the year's operations may be put down as quite satisfactory.

#### ENDOWMENT OF THE CHAIR OF SURGERY IN THE UNIVERSITY OF PENNSYLVANIA.

The widow of the late Dr. J. Rhea Barton, of Philadelphia, has endowed with fifty thousand dollars the chair of surgery in this institution. The professorship will hereafter bear the name of the distinguished surgeon to perpetuate whose memory this liberal gift was made.

#### PERSONAL.

Dr. Oakley, (M.D. McGill College, 1877) has been appointed apothecary or junior assistant surgeon to the Montreal General Hospital.

Dr. Major, of Montreal, is with the Turkish army before Plevna.

Dr. George E. Armstrong, (M.D. McGill University, 1877) has been appointed Assistant Demonstrator of Anatomy in the Medical Faculty of Bishop's University.

Dr. Burland has been appointed House Surgeon to the Montreal General Hospital in place of Dr. Cline deceased. Dr. Brodie has succeeded to the Assistant Surgery.

Dr. Roddick, Professor of Clinical Surgery, McGill University, returned from Europe early in September, after an absence of about five months.

Dr. Henchey, M.R.C.S., Eng., received his license at the meeting of the Board of the College of Physicians and Surgeons of the Province of Quebec, at their meeting held in Quebec, on the 26th of September. Dr. Henchey has settled in the ancient capital.

DR. MATTHEWS DUNCAN, having accepted the invitation to assume the duties of obstetric physician to St. Bartholomew's Hospital, will settle in London.

#### DEATH OF DOCTOR CLINE, HOUSE SURGEON MONTREAL GENERAL HOSPITAL

In our last issue it was our sad duty to briefly announce the death of Dr. John D. Cline, house surgeon of the Montreal General Hospital, on the 29th of September, from diphtheria, after only five days illness. Dr. Cline was a native of Cornwall, Ont., and had attained the age of twenty-five years. He was a graduate in arts of McGill University, taking his B. A. in 1871, and carrying off the Chapman gold medal. In 1874 he took his M. D. from the same University, and his diligence was seen in the fact that he was awarded the Holmes gold medal. He immediately entered the service of the Montreal General Hospital, as apothecary; in 1875 was promoted to the assistant surgery, and the present year he was elected house surgeon. In all the various appointments which he filled in that institution he evinced an untiring amount of energy, which won for him the esteem and warm friendship, not only of the medical staff, but of every one whom his duties brought him in contact, not excepting the poor and helpless, in whose cause he sacrificed his life. During the past year he filled the office of Secretary of the Medico-Chirurgical Society of Montreal, and the

faithful and energetic manner in which he performed his duties, the reports of the Society's proceedings published in these columns, bear ample witness. Had Providence spared his life, a bright future was in store for him. But, though cut off at the very outset of his professional career, his brief life was not in vain, and his memory will long be held in affectionate remembrance by all who knew him.

#### DEATH OF A MONTREAL DRUGGIST.

Mr. James Goulden, a well-known druggist of Montreal, and one closely associated with the pharmaceutical interests of this Province, was accidentally drowned, or rather died from the effects of a plunge in the cold waters of Gaspé Basin, directly after exercise, on a sultry day. The funeral took place at Montreal, on August 27th, and was largely attended. Deceased was a member of the Masonic body and the St. George's Society, but at the request of the family these organizations did not attend in regalia. In accordance with a request sometime expressed by deceased, the remains were followed by the Council of the Pharmaceutical Association of Quebec; Messrs. Alderman Mercer, Drs. Burland, Read, Douglas, Covernton, and Manson officiating as pall-bearers.

#### A WELL-DESERVED PUNISHMENT.

At the Court of Queen's Bench held at Sweetburg recently, Sears, who made an outrageous assault on the liberty and person of Dr. Brigham, of Phillipsburg, Missisquoi, Que., was convicted of robbery. On the pretence of bringing the doctor to see a patient a number of miles away, Sears decoyed him in the middle of the night to his (Sears') house, and there attempted to force him to sign some papers under threats of murder. His Honor Judge Dunkin condemned the prisoner to ten years in the penitentiary for the crime.

#### PROCEEDINGS OF THE CANADA MEDICAL ASSOCIATION.

In our advertising columns the Publication Committee announce that the proceedings of the Tenth Annual Meeting, held in September last, in Montreal, will be issued about the 15th of November, at the rate of \$1.25 a copy. It will be a volume of about 350 pages, and will contain all the valuable papers which were read. We advise all members of the Association, and others, to subscribe. Dr. Osler, Montreal, is the Secretary of the Committee.

#### LARGE DOSES OF IODIDE OF POTASSIUM.

In the course of the recent meeting of the American Dermatological Association, it was stated that Dr. A. Brooks, of Chicago, had given as much as one thousand grains per diem of iodide of potassium.

#### LINDSAY & BLAKISTON'S VISITING LIST FOR 1878.

This Visiting List for the ensuing year has been upon our table for some time. It still, in spite of the appearance during the last few years of a few rivals, maintains its pre-eminence. We have used it constantly, and look upon it as invaluable. We very strongly recommend its employment to our readers.

#### DEATH FROM CHLOROFORM.

The *Toronto Globe* of July 20th reports the death, July 18th, from chloroform, of a patient in the Toronto General Hospital. It was stated at the coroner's inquest that no more than two drachms of chloroform were administered, and that it was given drop by drop. The patient was a woman on whom it was intended to perform some slight operation. The *post mortem* revealed fatty degeneration of the heart.

#### PHYSICIANS' PRESCRIPTIONS.

In Great Britain and on this Continent there is a well-grounded complaint from physicians, that prescriptions are believed to be the absolute property of the person receiving them, to be handed round among a large circle of friends. Especially is this the case with a certain class of prescriptions, one of which, from a well-known Montreal physician, having, we are informed, been made up several thousand times by persons simply giving the number of the desired recipe. The difficulty is one which is hard to reach, but we notice that the German government is about to make an attempt to grapple with a portion of it. It proposes to pass a law prohibiting chemists to make up any prescriptions containing strong remedies, unless the prescription is again countersigned by the medical man who originally gave it. Our solution of the local difficulty we have alluded to would be the suggestion that the physician should dispense such remedies. It would then be impossible to have them repeated, except through the physician himself.

#### LATHAM'S CHROMOS.

These chromos are very largely in demand, and are giving entire satisfaction. They make a handsome ornament in a surgeon's office, at a very low figure. See *Adv.*

## Original Communications.

*Introductory Address*, delivered at the meeting of the Medico-Chirurgical Society of Montreal, Nov. 2nd, 1877, by the President, Francis Wayland Campbell, M.A., M.D., L.R.C.P.L., Professor of Physiology, Bishop's University.

GENTLEMEN,—At our last meeting I briefly thanked you for the honor which you conferred upon me in electing me to the office of President of this Society. I am deeply sensible of this mark of confidence from my professional brethren, and trust that when my term of office shall have expired I may be able to hand over its direction to my successor, feeling that your confidence was not misplaced. From the very inception of this Society I have taken a warm interest in its welfare, and by constant attendance at its meetings have endeavored to realize to the fullest extent all those benefits which I think can be derived from associations such as our own. And, gentlemen, these benefits are of such a character, at all events in my estimation and in that I am sure of many I now see around me, that I often wonder at the comparatively small attendance we have at many of our meetings. I do not like, the very first time I occupy the chair, to find fault, and yet I cannot help recording my opinion that some of our members, who, from the length of time they have been connected with the profession, must have accumulated a large experience, are very much to be blamed for non-attendance at our meetings, and giving us the benefit of that experience. Some of them we have rarely seen within these walls, others make angels' visits, few and far between. I do not accept as satisfactory to my mind the plea of constant occupation. My time is as fully occupied as that of any member of this Society, and yet I have been able fully to endorse the old adage "where there is a will there is a way." Very seldom, indeed, since our formation have I been absent from our meetings, and simply because I have always arranged my work on the day of meeting with a view of being present. What I have done other members have done, and is in the power of every member of this Society to do. I do not desire to say anything unkind in this connection, but I am firmly of opinion that we have not a few members who do not

either do their duty to this Society, or to the profession. Montreal is the centre of medical education in this great Dominion; it should be the centre of medical literature; its medical society should be the medical society of the Dominion, where medical men visiting our city would anxiously go to meet men, and hear them, whose names have for long years been familiar to them. Some of these men we see tri-annually, some never deign to honor our meetings with their presence, while some seem actually to have been all but completely extinguished after having occupied the Presidential chair, as if the office which I have the honor to hold was the step from which politely to say "Adieu." I am sure that the course which is followed by some of the older members of the profession in this city towards this Society is not what the members have a right to expect from them. Certain honors carry with them certain responsibilities, and the room of this Society is the proper place to acquit themselves of their stewardship, for stewardship in my opinion is. I do not believe that those who for years have occupied positions capable of affording large experience have any moral right to sit quietly before the fire with their slippers on on the Friday evening of our meeting. The members have the moral right to expect them to be with us, and out of their abundant storehouse refresh us with words of experience and wisdom. I trust I have not said too much on this head. For years I have felt very strongly upon this point, but within a short period it was somewhat unpleasantly brought to my mind by a visitor saying to me, after our meeting was over: "Why don't more of your big guns come to your meetings?" It happened to be at a time when the roads were bad, and I replied, "it was impossible to bring 'big guns' over such bad streets." But the remark I felt a reproof, although in no wise responsible, and the fact, I felt, was not at all a creditable one. I need hardly say, however, that we are not quite deserted, and that we have a few of the elder lights nightly with us, and how much they do to make our meetings agreeable and profitable is known to us all. The regularity of their attendance is a bright example for others to follow. I have spoken about the benefits to be derived by a regular attendance at our meetings. What are those



benefits? First, I may name the social element or benefit, and to me this is a pleasant one. Day after day we are busy at work. If we see each other, as we are swiftly driven past, it is simply to give the friendly nod. How cold and formal it often is. Engrossed, as we are, by the cares, perchance, of the patient we are going to see, it may be given without hardly knowing who it was intended for. If we saw no more of the mass of our fellow-practitioners, what an ice clad lot we would be! But the ten or twenty minutes' chat, which takes place once every two weeks while we are assembling, serves to break down barriers, to make us known to each other, and the social element of our nature is developed, and even this, gentlemen, is something worth living for. Then we have the exhibition of pathological specimens, and their explanation by our mutual friend, Dr. Osler. Gentlemen, I consider that this Society is indebted, greatly indebted, to Dr. Osler for these exhibitions, which in my opinion, have, since their introduction, doubled the value of these meetings. If nothing else was done but to examine the pathological specimens, and listen to the clear descriptions by Dr. Osler, it would repay even a long walk to be present. Then we have the reading of papers, and that this Society has produced many papers of interest, and some of more than ordinary interest, will, I am sure, be admitted by us all. Surely, listening to the various papers cannot be devoid of interest, and either from the paper itself, or from the discussion which follows, some useful hint may be derived. The preparation of a paper involves often considerable labor. It would be a good thing if we could always bear this fact in mind, for it would then strike us most naturally that a good audience is an encouragement to still further labor, while, on the contrary, the reading of a paper which has cost much time and thought to a bare quorum has a chilling effect upon any further productions from the same quarter. If this fact was remembered, perhaps some would even put themselves to a little inconvenience to be present at our meetings. The discussion on papers seems to me peculiarly valuable in training the mind to rapid thought, and in time giving all those who take part in it full confidence, whereby they speak more deliberately, arrange what they have to say in better

order, and when they have done know what they have said.

The retiring President, my friend, Dr. Fenwick, in his parting address made some suggestions which are I think worthy of the serious consideration of this Society. We now number about sixty members, and his suggestion that we should have a room entirely our own, which could be used as a reading room, (he and myself supplying reading matter from our Exchanges) is quite feasible, and I would suggest that this evening some action be taken in the matter. Perhaps the form it had better take would be the appointing of a committee to make all necessary enquiries.

Another use to which I hope to see this Society put before my term of office expires is that of mutually protecting each other. No profession is so systematically swindled as is our own. We are called hither and thither, by night and by day, but when payment is asked, we see them no more. They find another as ready to accept them as we have been, and as others were before us. The plan proposed to be adopted by this Society, viz., that of having what may be termed a "black list" for the use of our members, will I hope do much to lessen this evil, which, if the experience of others is similar to my own, must be characterised as gigantic. Now, gentlemen, I think I have said sufficient to show you that this Society deserves the hearty and personal support of every member of the profession in our city, and I trust that our meetings during the coming year will be largely attended, and that much important work will be accomplished. The remarks I have made concerning the absence of some whose presence with us I think we have a right to expect I have uttered simply because I think it right it should be known that among many there has been a feeling of very deep regret that our meetings have not been more largely and regularly attended by those who by age and ripe experience are so well qualified to add to the interest of our gatherings. On my part, gentlemen, I can assure you nothing will be wanting to make the year we are now entering upon thoroughly successful. Your assistance is, however, necessary for its full accomplishment. I feel sure I will receive it.

*To the Editor of The Canada Medical Record.*

SIR:—I had intended commencing the study of medicine this fall in the city of Montreal, but on my reaching that city I was more than mortified to find that I was unable to do so. The cause of my occupying this, to me, most unfortunate position was that I had neglected to follow the new Act, which says that the preliminary examination before the Board must be passed previous to the first year's attendance at college. This was news indeed to me, for I had intended to present myself for examination before the University examiner. I was, however, willing to go before any one, but was told there was no help for it but to wait till next spring, as the Board examinations were over. I am thus obliged to wait a whole year. It does seem to me that the Act being a new one, and its provisions not very generally known, that some provision should be made whereby a special examination might be had; indeed, I am told that in Ontario for an extra fee a special matriculation examination may be had at any time. Why not so in Quebec?

RAWDON, Q., November 5, 1877. S.

We have heard of several cases, all much like that of our correspondent. In one instance that we know of the gentlemen went to Ontario paid an extra fee, got his examination, and was successful. We think it would have been better had "S." done the same, rather than lose a whole year. We, however, agree with our correspondent that our own Board should be able to give special examinations.

## Progress of Medical Science.

### SOME POINTS IN THE ART OF PRESCRIBING FOR CHILDREN.

By ROBERT FARQUHARSON, M.D., F.R.C.P., Lecturer on Materia Medica at St Mary's Hospital Medical School, etc.

I venture to put before you a few practical observations on some points in the art of prescribing for children, because the subject is one which has hardly yet been treated on a sufficiently comprehensive basis. Much valuable but scattered information may be gleaned from the pages of contemporary literature, and much of what I am about to say has been said before; but it seems to me that some little service may be rendered by weaving these threads of knowledge into something of a more connected whole, and obtaining the opinion of some of those experienced physicians who have devoted themselves to the diseases of the very young.

Time, however, will not permit me to do more than touch, and that briefly, upon one point in connection with a subject which is really a large one, and to lay before you some facts and ideas on dosage; and here, again, I must once more subdivide, and take only a small section of a great therapeutical question, whose importance has only very recently begun to acquire that general appreciation which it eminently deserves. I might well be tempted to invite you to join with me in some reflections as to the comparative efficacy of the occasional large or the oft-repeated minute dose—a question which must before long become one of the most pressing in the materia medica; or it might be interesting to inquire as to the desirability or otherwise of inducing the physiological effects of drugs for the relief of pathological conditions; but at this time I mean to restrict myself simply to this proposition—the difference between children and adults in respect of the quantities of various drugs which may be taken, not only with actual impunity, but with absolute benefit.

Now, systematic works have too often not only ignored the teachings of Ringer, Fuller, and other modern investigators, but have done much to hamper and confuse our knowledge in this direction by laying down the law that children necessarily require much smaller doses of most of our active drugs than adults; and we, therefore, see in books on materia medica, as well as on children's diseases, elaborate tables setting forth the quantities to be prescribed with safety at different periods of early life. Some years ago, and possibly even now, a student would run a good chance of being afforded the opportunity of continuing his studies, were he to tell his examiners that a child can take a dose of belladonna with impunity which would probably induce physiological symptoms in the adult; and, as a natural consequence of this mode of teaching, great timidity in practice has resulted; and that this may be a positive evil requires but little reflection to show. If a dose of a particular remedy be too small to effect the purpose for which it is ordered, it is much more likely to do harm than good. Thus an insufficient purgative merely irritates the patient's bowels without giving relief; too small an opiate excites the nervous system and banishes that sleep which it was intended to attract, and numerous other instances will readily occur in illustration of a statement which hardly requires such confirmation.

Granted, then, the importance of administering our remedy in doses sufficient to produce their full remedial effect, I shall lay down, as my first and only proposition, that children require doses of many medicines quite as large as those which are commonly ordered for persons of mature age. Now, when I speak of children, I shall not refer to mere infants, whose tender organization and sensitive organs and functions require special consideration from a therapeutical point of view. Thus the yielding nature of their skulls, admitting as it must of wide differences in the proportion of cerebral blood, no less than the natural tendency to sleep at that early age, plainly indicate caution in the use of narcotics. Purgatives

and various other remedies must then be used with caution, or we may initiate an irritable condition of stomach and bowels which all our skill may not readily remove. In dealing with general principles, therefore, let it be understood that I refer to children over one year in age, and, perhaps, before beginning the consideration of special instances in favor of my views, I may briefly touch upon the explanations which most naturally suggest themselves of the peculiarity which forms the excuse for my remarks. In prescribing for adults, we are frequently annoyed by the very various results obtained in different persons from a precisely identical quantity of a particular drug. Thus, one patient will develop a copious crop of acne from a few grains of bromide of potassium, whilst another can take ounces without such effect. Another will be salivated by a small quantity of mercury, or be unable to swallow quinine without uncomfortable nervous symptoms or a specially irritable rash. Children, however, do not present in anything like the same degree these special peculiarities of idiosyncrasy; the effects of medicines are pretty constant in their case and we may generally anticipate the satisfaction of finding that our remedy has acted as we wished, and without any of that excess or eccentricity of action which too often brings undeserved discredit on the medical man. The reason which tells us why young children bear heavy doses of potent medicines must also cover this difference from their elders, and we might at once shut up further enquiry by concealing ourselves behind the dense cloak of ignorance implied in the assumed fact of an ultimate difference of constitution. But, true as this may be as an abstract proposition, we must look a little deeper, and ask, in the first place, whether some peculiarity of digestion may not come to our aid, and whether infants may not emulate some of the lower animals in the power which they possess of neutralizing or destroying poisonous principles, as rabbits harmlessly browse on belladonna, and pigeons baffle the deadly action of strychnia, etc. But of such powers in the human being, at any period of life, we have no shadow of proof, pre-emptive or otherwise; and it is probable that remedies reach the blood of children in the regular way, and through the same chain of physiological processes as in the case of adults. So we must again go forth in search of our explanation; and I think we may find some approach to it, at all events, in the view that, in consequence of the rapid growth taking place in the body during early life, the blood and tissues are in a condition of specially active destruction and renovation. Drugs, such as the metals, which probably combine with the albumen of the circulating fluid, are here rapidly cast out of the system. Other remedies, which act more particularly on the nervous system, are cast out with effete matters before they have had full time to produce their physiological effects, or, at all events, before these effects have attained to anything like completeness. Thus we do not often find developed in children that accumulation which occasionally, if rarely, is observed in patients of older growth, because the drug is removed before it can produce that continuous

and ever intensifying influence on the nervous system which eventually finds expression in what we may call a discharge.

So much, therefore, for my explanation, such as it is, of the facts which I shall now proceed briefly to lay before you.

Now, in the first place, I am bound, of course, to confirm the usual opinion of the dangers of opium in very early childhood; and it is not long since I saw an infant of eight months nearly narcotized to death by six two-minim doses spread over two days. But those within the period of life which I have selected for consideration can bear moderate quantities, and chloral seems always well borne. For instance, I have lately had under treatment a little rickety girl suffering from recurring attacks of laryngismus stridulus, to whom three and a half grains were given with benefit thrice daily. The same patient took ten, and finally fifteen grains of bromide of potassium, before any beneficial effect was attained; and I have always observed that this drug is well taken by children. Twenty and thirty grains have been no uncommon dose to reach in patients of from eight to ten suffering from epileptic seizures, and in them I have never observed any symptoms of bromism. The opposite seems to hold good of iodide of potassium, so far as my limited experience goes; for I have three times seen papular and petechial eruptions produced by one-grain doses of this drug, and I should specially like to ask whether this corresponds with the observation of others.

Arsenic is usually well taken. I should have no hesitation in ordering five minims of Fowler's solution for a child six years old. Ten minims have been occasionally ordered; and I had recently under care a little girl, aged ten, whose somewhat obstinate psoriasis only began to yield when the dose was pushed up to sixteen minims. When physiological symptoms present themselves, as they sometimes do, it is important to know that they do not assume the usually described type, and that vomiting is the most usual symptom. I have seen this follow a single one minim dose, and more rarely we meet with a red and irritable tongue, dry lips, injected eyes, and abdominal pain; girls being in my experience, contrary to the statement of Ringer, more susceptible to the overaction of the drug than boys.

Prussic acid may be pretty freely prescribed, and I have given nearly two minims to a child of two years with some slight benefit, for pertussis; and at the age of seven, I have given nearly three minims for the successful arrest of sickness.

We know that emetics must be given in very full doses. The intestinal canal of young children seems strangely insusceptible to the action of purgatives, and large quantities of Gregory's and compound jalap powders must be given before satisfactory action is attained.

I have by no means exhausted the instances to be gleaned from my own experience or that of others in support of my main proposition; but time presses, and I will conclude with a reference to belladonna, whose comparative harmlessness to young children

has been most amply confirmed since Fuller first pointed out the fact some years ago. I have very commonly prescribed from 20 to 30 minims of the tincture for children of from fifteen months to five years, and have invariably found that the younger the child the less likely was the dose to be followed by physiological symptoms. I have on several occasions pushed the quantity up to one and a half and even two drachms of the tincture three times a day in children of from ten to twelve, with only a very tardy development of uncomfortable results; but, in my experience, a few ten-minim doses are usually sufficient to cause uncomfortable dryness of the throat in adults. In children, however, we seldom have complaints of this, nor do we observe dilatation of the pupil; general languor, want of appetite, troublesome diarrhoea, perspiration about the head and rapidity of pulse, being in them usually obscured.

I have ventured to bring these few remarks before you, as the outcome of some little observation and experience, and in the hopes of stimulating discussion on a subject which seems to afford a promising field for future investigation.—*British Medical Journal*, Sept. 29, 1877.

#### GROWTH OF THE HUMAN HAIR AFTER DEATH.

Dr. Caldwell, of Iowa, states that in 1862 he was present at the exhumation of a body which had been buried two years before. The coffin had sprung open at the joints, and the hair protruded through the openings. On opening the coffin, the hair of the head was found to measure eighteen inches, the whiskers eight inches, and the hair on the breast five to six inches. The man had been shaved before being buried. In 1847, a similar circumstance occurred in Mercer county, Pa. In digging a grave, the workmen came upon the skeleton of a man that had been buried ten years. The hair was as firm as during life, and had grown to a length of eleven or twelve inches.—*Medical Record*.

#### MEDICINE AMONG THE ANCIENT EGYPTIANS.

The *Examiner* for Sept. 22nd states that the edition of the famous papyrus which Mr. George Ebers brought to light three or four years ago, and which he entitled "The Hermetic Book of Medicaments of the Ancient Egyptians in Hieratic Letters," is the theme at present of general discussion in Germany. The papyrus is in the library of the University of Leipzig, where, for the sake of better exhibition, it has been cut into twenty-nine pieces, each of which lies in a glass-case. From palæographic and historical evidence, Mr. Ebers reckons that the document dates from the middle of the sixteenth century before the Christian era, and it is thought to contain one of the six books on medicine mentioned by Clements of Alexandria—namely, that referred to under the title "Ἡερὶ φαρμακῶν." The name of Hermetic books is derived from the Greek Hermes, which is the Hellenic name for the Egyptian god

Thyoth, or Thoth, who is said to have revealed to mankind this sort of scientific knowledge. Of forty-two Hermetic books, thirty-six contained the whole Egyptian philosophy. Six of them treated on the structure of the body, on illnesses, on surgical instruments, on medicaments, on the eyes, and on female complaints. It is probable that the Ebers papyrus is the oldest medical work left us, older than a corresponding text of Rig Veda. It is worthy of note that Egypt had state-paid doctors, who exercised their profession in accordance with written medical treatises long before the art of healing attained any scientific development among the Greeks; and it is from Egypt, as can now be proved, that the Greeks mainly drew their medical knowledge. Herodotus had expressed this opinion, but his statements have always been doubted. The emancipation of medicine from theology must, therefore, have taken place earlier in Egypt than in Greece. It is a curious fact that even in the days of Herodotus specialists existed, some for the eyes, others for the head, others for the teeth, others for the stomach and internal disorders (Bk. ii. 84). Homer, too, speaks of the Egyptian art of healing, calling each Egyptian a medical man. The anatomical knowledge of the Egyptians was probably greater than has hitherto been assumed, but during the later decay of their medical art, the magical element seems to have crept in. The valuable papyrus is further interesting in a mythological sense, as it is stated to contain information respecting the Egyptian deities, who were said to be subject to illnesses, and to be in the habit of curing each other.—*The Lancet*, Sept. 29, 1877.

#### SYCOISIS.

Though sycosis can be regarded a local disease, having its origin in purely local conditions of the part affected, yet certain conditions of the general system predispose to its development, aggravate the disease when present, and prolong its duration. Those conditions must be taken into account, and receive the necessary treatment if the disease is to be treated with reference to rapid cure and prevention of a relapse. Sycosis is in this respect similar to many other skin-diseases which, although local in origin and capable of being cured by local applications alone, yet yield much more readily to combined local and general treatment, and the relapses are less frequent than when local treatment only is employed. The general nutrition of the patient must not be neglected, and any morbid condition, as rheumatism, dyspepsia, syphilis, struma, demands its appropriate treatment. Some one of those conditions is generally present, and the condition of the general system, and of every organ of the body, should be known before commencing treatment. A strumous condition of the system especially aggravates the disease, and causes an unusual amount of pus to be produced. It is unnecessary to enter into full particulars as to the proper treatment of any of those constitutional diseases, as that belongs to the domain of general medicine, and every phy-

sician who undertakes to treat skin-diseases should have a proper knowledge of internal diseases and their therapeutics. If there is a rheumatic condition of system present, alkalies are necessary; if the patient is anemic, give iron, tonics, and a generous diet; for syphilis, mercury in some form, or iodide of potassium if gummata are present; and if strumous, cod liver oil, and so on. Eczema, or superficial dermatitis, if present in the same locality, must be treated simultaneously with the sycosis, as the latter cannot be cured without the removal of the former. A knowledge of the proper treatment of eczema in its different phases is of much assistance to the physician in the treatment of sycosis, as there is a great similarity between the two diseases as regards the course of treatment to be followed. In sycosis of the upper lip it is especially to be borne in mind that the disease is generally kept up by a coryza, and that it is almost impossible to cure the former so long as the discharge from the latter continues to irritate the part. Much can be accomplished in the way of prophylaxis in warding off a relapse of the disease by a knowledge of the special predisposing cause at work in each case. If the patient's occupation plays an important part in producing the eruption, it should be changed, if possible. Exposure to excessive heat or cold should be avoided, also the use of cosmetics, snuff, and other irritating substances. Cleanliness is an excellent prophylaxis in this affection. When the disease is present, our chief reliance for its removal consists in local treatment, though constitutional treatment is of decided advantage as an adjuvant. The latter alone is never sufficient to effect a cure of the disease; but local treatment, used according to the special indications of each case, is adequate to effect a cure unaided by constitutional treatment, though relapses are more liable to occur. In the acute stage we should endeavor to allay irritation, and wait until the swelling and pain subside before using active measures. Lead and opium, warm applications, as a sponge dipped in hot water, or poultices, should be applied. The treatment in this acute stage is simply that which is applicable, and is everywhere employed, in inflammation, when we wish to allay irritation. Until the acute symptoms subside, this soothing treatment is to be continued. After they subside we must still continue to allay irritation, for, as I have shown, an irritable condition of the skin is the principal predisposing cause of the eruption.

In the chronic stage the treatment varies, exactly as in the case of chronic dermatitis, according to the condition of the part affected. To reduce irritation, produce absorption of effused products, and remove the existing inflammation, should be the object in view. If scabs are present, they must be removed with poultices, ointments, or oily applications before commencing other treatment. If the scabs are not removed it is useless to make local applications, as they do not reach the part you wish to influence with them. If the patient has a long beard, and will not permit its being removed, the

sycosis will be much more difficult to cure than if the beard is short. Its presence, however, is not an insuperable object to successful treatment, though it retards the cure on account of the difficulty of applying remedies to the seat of the eruption. If there is any inflammatory thickening, absorbent remedies are required. Those, however, which irritate, as iodine, must not be used, as they aggravate the disease by increasing the irritation in the part. Some preparation of mercury, sufficiently diluted to prevent it from producing too much irritation, is the most suitable remedy. If the thickening is considerable, and of long standing, the oleate of mercury with morphine acts very efficiently. Care must be taken, however, not to use a very strong solution, or to apply it oftener than once every three or four days, as it sometimes irritates, and, from the facility with which it is absorbed, may produce ptialism. Such accidents have occurred in my practice after very few applications of the oleate.

Epilation first recommended by Plumbe (*l. c.*), is not only exceedingly useful in reducing the inflammation, but is absolutely necessary in the treatment if permanent alopecia is to be avoided. Some authors say they derive but little benefit from it, but I believe, if it is performed at the proper time, the result is most beneficial. To remove the hairs during the papular stage, while they are still firmly seated in the follicle, increases temporarily the irritation, as their extraction causes great pain; but during the pustular stage they are easily extracted, and when the operation is performed not only has the pus a free exit but the follicle is thereby frequently saved and permanent alopecia prevented. Though extraction during the papular stage causes pain and temporarily increases the irritation, yet I believe the evil resulting from the additional irritation thus produced is more than counterbalanced by the good resulting from the free exit allowed to the pent-up pus and the removal of the irritating hairs. Fomenting the part with hot water lessens the pain produced by the operation of extraction. In performing the operation, but a single hair should be seized with the forceps at one time, and traction should be made in the direction of the axis of the hair. Every hair perforating a papule or pustule should be extracted. In cases of circumscribed sycosis—that is, where the disease remains confined to a small spot for a long period—it is better to remove all the hairs from such a spot, even if the operation causes considerable pain. This removal of the hairs, to save the follicle and allow exit to the pus, is, I believe, a much better procedure than opening the pustules, or rather small abscesses, with a knife.

In using ointments, the same rules are to be observed as in other skin diseases. They should always be spread on cloth and bound on the part as they then act more powerfully and efficiently than when simply rubbed in. The diachylon ointment of Hebra is most frequently employed, and is of great service in curing the disease. The ointment



should be applied twice in every twenty-four hours and kept constantly on the part.

Whether the part affected should be shaved or not is a disputed question. Good authorities are found to differ on this question, some recommending and others opposing the operation. Basing my views upon the nature of the disease, and knowing that shaving irritates the inflamed part, I believe it is injurious and that it is much better to cut the hairs close to the skin with scissors. If they are thus closely cut, the part is not irritated by the operation; ointments can be properly applied and the hairs easily extracted. Hebra (*l. c.*), who says he has tried the different methods of treatment, is decidedly in favor of daily shaving and washing the part; yet, as equally good authority is found opposing it, future experience must decide which is the proper course to pursue.

The plan pursued at Cannstätt ("Ueber die Behandlung der Sycosis in der Heilanstalt zu Cannstätt," *Blätter f. Heilwissenschaft* Jahr. 4, Nr. 11, 1873), of rubbing in a salve composed of two parts of ship-tar and one part of green soap until the hairs are easily extracted, then touching the cavity with acetic acid, is unnecessarily severe, and cannot be indicated in any except perhaps chronic cases, with considerable induration and thickening of the cutis.

Ointments containing sublimed sulphur, or the iodide of sulphur, in varying proportions, according to the amount of induration and irritability of the skin, are of service, but must not be made so strong as to produce irritation.

In strumous subjects, the local application of cod-liver oil often acts more beneficially than ointments of either lead, sulphur, or mercury.

Hence epilation, and the application of astringent ointments, as the diachylon ointment of Hebra, with or without the addition of a mercurial preparation according to the amount of induration present, and appropriate constitutional treatment, will enable the physician to cure all cases of sycosis, except the destructive form, within a few weeks, providing the patient does not continue to expose himself to the predisposing cause of the disease.

I will not enter further into the treatment appropriate for the disease in its different stages and conditions, as that would occupy too much space, and it can be learned in any good work on diseases of the skin. Epilation and the treatment appropriate for eczema can be considered the proper treatment for sycosis. We have learned that the skin is in an irritable or inflamed condition previous to appearance of the sycosis, and that the irritation from the hairs acting upon this changed tissue produces the peri-folliculitis. This irritability must be removed, as well as any actual inflammation or inflammatory products in the affected part. The same rules for treatment hold good here as in inflammation or irritability in any other part of the body, and the physician must know those rules and have a clear idea of the exact nature of the process going on in the part in the different stages and conditions of

the disease. Knowing those things, he cannot fail to cure quickly every case of ordinary sycosis.—*N. Y. Med. Jour.*

#### THE HYGIENE OF THE HAIR.

Professor Erasmus Wilson, who is probably the highest living authority on the subject, has lately given a course of lectures on the hair before the College of Surgeons in London. They are reported in full in some of the English medical magazines, and an abstract of the more practical portions will doubtless be of interest to many readers of the *Journal*.

Cleanliness is, of course, insisted upon as of prime importance, but washing the hair is emphatically condemned. Brushing is to be preferred, as it promotes circulation, removes scurf, and is in all respects a more effective stimulant than water. Cutting does not encourage growth as much as is commonly believed, but it is advantageous in the case of the short, slender hairs generally called "young hairs."

Of the countless applications recommended for the cure of baldness few are ever successful, and in the occasional instances in which they appear to be useful it is possible that sequence is mistaken for consequence, the *post hoc* for the *propter hoc*. Most of these specifics are stimulants, not excepting petroleum, which has lately been eulogised. Croton oil, though excellent as a stimulus, is objectionable on account of the irritation it often causes, and which sometimes extends to the eyelids and the face. Cantharides, though milder and more manageable, is likewise liable to give rise to inflammatory congestion and vesication, and sometimes to suppuration and ulceration. The skin may be peculiarly sensitive, or the remedy may have been employed too energetically, both as to quantity and time. Professor Wilson has seen several instances in which cantharidine has been absorbed into the system and has given rise to ischuria. As a rule, therefore, he rarely uses cantharides, and then always in a guarded manner. Certainly, it is not to be trusted to the acknowledged indiscretion of the public as a proper remedy. Acetic acid, or rather strong pyroligneous acid, he has discontinued for many years; but it is still a favorite, notwithstanding its strong and disagreeable odor.

Ammonia is Professor Wilson's favorite stimulant; it is unlikely to create inflammation and its consequences; it is neither absorbable into the system, nor could it do harm if such were the case; and its odor, refreshing at the moment of its use, speedily evaporates. In a case of ordinary madesia or falling out of the hair, he prescribes a lotion composed of strong liquor ammoniac, almond oil, and chloroform, of each one part diluted with five parts of alcohol or spirits of rosemary, and made fragrant by the addition of a drachm of the essential oil of lemons. The lotion should be dabbed upon the skin of the head after thorough friction with the hair-brush. It may be diluted if necessary; it may be applied sparingly or abundantly; and it may be used daily or otherwise.

There are cases in which a less stimulating and even a refrigerating lotion may be desired, and where an objection may be raised to the quantity of oil contained in the above. In such cases a lotion of borax and glycerine, two drachms of each to eight ounces of distilled water, is cooling and refreshing; this lotion allays dryness of the skin, removes scurf, and subdues irritability.

In cases of complete baldness, and also in alopecia areata, a stronger stimulant application will be required. For this he recommends frictions with a liniment composed of equal parts of the liniments of camphor, ammonia, chloroform and aconite, to be well rubbed into the bare places daily, or even twice a day, so as to produce a moderate amount of stimulation. In cases of ophiasis, due to neuralgia of the cutaneous nerves of the scalp, this liniment is very valuable. In other cases the liniment of iodine may be painted on the bare patches daily, or they may be rubbed with the ointment of cantharides or any other powerful stimulant. The intention of all these local remedies is to stimulate without setting up irritation; to increase the energy of circulation and innervation of the part; and in some instances to abstract the excess of fluids from the tissues of the skin by inducing exudation. But these results must be accomplished as far as possible without pain and without severity.

The constitutional treatment of alopecia should consist in the adjustment and regulation of the functions of digestion and assimilation; and, where no other special conditions are to be fulfilled, the adoption of a tonic regimen and the administration of tonic remedies. Of these last arsenic bears the palm, and may be advantageously prescribed in doses of two to four minims three times a day directly after food, and in any convenient vehicle.

Grayness, canities, or poliothrix depends like baldness on defective powers of the skin, and the indications for treatment are exactly the same,—to strengthen the part and at the same time strengthen the patient. As means of temporarily staining the hair the lecturer mentioned a weak solution of permanganate of potash, a lotion holding in suspension sulphur and acetate of lead, or the so-called *eau des fées*, consisting of the hyposulphites of lead and soda; among dyes sulphides of various metals, especially silver, the pyrogallate of iron and ferro-cyanide of copper. The hair, as is well known, contains sulphur, and a solution of lead brought into contact with sulphur produces a sulphide of lead which is black in colour. Sulphur and acetate of lead in suspension and solution in water supply both the elements necessary for artificial coloration of the hair, and constitutes the popular lotions sold so largely.

Actual dyeing of the hair is a more elaborate process; the hair must be washed with soap in the first place, to get rid of grease, which would otherwise interfere with the absorption of the fluid by the hairy tissue; secondly, the hair being dried, the metallic solution is to be employed and left to soak into the hair; and thirdly, the mordant fluid is to be brushed upon the part with a view to bring it in

contact with every individual hair. If this operation sufficed for a considerable period, all would be well; but as the hair grows quickly, the newly-grown part exhibits its original whiteness, and another dyeing soon becomes necessary. The tone of color produced by the first application may have been perfect, leaving nothing to be desired, but the white roots of the hair cannot be reached without a fresh coloring over the whole, and then the evils become apparent. A succession of coats of color renders the hair more intensely black than nature herself could have accomplished, and the harmony of the features of the individual is disturbed; the mellowing of the lineaments of the countenance produced by white hair is reversed by the depth of the blackness, and the features are rendered harsh and severe. The theory that an appearance of youth is maintained by the color of the hair is not consistent with fact, and there is always the danger that the hair may appear youthful, while the features themselves are expressive of old age.

As to danger to the health and constitution from dyeing the hair, Professor Wilson thinks that we cannot reasonably allege the possibility of any serious evils; for lead, to which are imputed the most dangerous of the qualities of hair dyes, enters into the composition of several of our cooling and astringent and sedative lotions, and even injections; and although undoubtedly some cases are on record of damage resulting from its internal and excessive use, Goulard's lotion is commonly regarded as one of the most harmless of our remedies. Perhaps a distinction may be drawn between its therapeutical and its cosmetic use, but it is difficult to distinguish the difference. Reference is made to some of the alleged cases of lead poisoning from the use of hair dyes, but it is suggested that a more careful examination might have found the cause elsewhere, perhaps in the water used for drinking. It is admitted, however, that there may be cases of peculiar sensibility to the poisonous influences of lead in which these dyes may be injurious. Professor Wilson, as we have said, is high authority on these matters, but we nevertheless advise our readers to avoid all hair dyes containing lead, especially as there are preparations for the purpose that are certainly harmless,—if one is foolish enough to dye the hair at all.—*Boston Journal of Chemistry*.

#### NEW PROCESS FOR PLACENTA PREVIA.

(From the *Philadelphia Medical Times*.)

At a Conversational Meeting of the Philadelphia County Medical Society, Dr. J. S. Eshleman related a case of placenta previa which he had treated in consultation with Dr. I. McGuigan. They met soon after the first profuse hemorrhage had taken place. The pains were feeble, as is usual in these cases; the flow continued. The patient could not long survive it. The os would scarcely admit the tips of two fingers; it was from an inch and a quarter to an inch and a half in diameter. With Dr. McG.'s

consent, he at once applied the forceps and brought the child's head firmly down upon the placenta, compressing it as well as the uterine sinuses, with the effect of instantly arresting the flow of blood.

Feeble pains were now stimulated and aided by equable traction upon the instruments. The forefinger of the left hand was frequently interposed between the head of the child and the inner surface of the os to graduate the amount of force applied by the forceps held in the other hand, and, aided by the uterine efforts, the os in time began to yield. The uterus descended under the traction somewhat, but less than is often witnessed in natural labor. The case was conducted gently, each effort followed by rest in imitation of natural labor, and terminated in about one hour. There was no perceptible loss of blood, nor was there any concealed or post-partum hemorrhage. The child, though faint, soon rallied. The uterus closed softly upon the placenta, a portion of which remained firmly adherent near the os; the remainder lay protruding from the organ in a somewhat crushed condition, yet there was no hemorrhage. After this condition was carefully examined by Dr. McGuigan also, he proceeded to dislodge the placenta, not by introducing the hand, "paring" or tearing it off, but by external pressure, moulding, and manipulation. Mother and child are doing well. \* \* \* \*

Dr. Goodell asked Dr. Eshleman to explain how the os was made to admit the forceps.

Dr. Eshleman replied that the diameter of the os was less than the width of the blade of the forceps, but he was able in the absence of pains to elevate the head of the child, when the blade of the forceps would elongate the circular opening into the shape of a button-hole, so as to admit its passage; the second blade, being somewhat narrower, will pass over the shank of the first and enter the same aperture. It is surprising to test how small an opening will admit the forceps, and equally so how large a one is required to admit the hand.

In reply to Dr. Hamilton, he said that ergot was given in the hope that it would favor contraction of the emptied womb, but its effects could not be waited for to aid labor or depended upon to arrest hemorrhage.

Dr. McGuigan, being present, was asked to give his statement of the case reported by Dr. Eshleman.

He stated that the day but one prior to her delivery, he found blood issuing from the vagina. She had lost a previous gestation by hemorrhage. The cervix was three-quarters of an inch in length, and he could feel the foetal envelopes, but not the placenta. Two days after he found her bleeding, and in regular labor; the os open three-fourths of an inch, the membranes intact; the placenta could be felt three-fourths of an inch from the external os on the left side, and

detached for the space of two inches. The pains were quick and forcible; the head was not engaged. He punctured the membranes when the pains became feeble and slow. The bleeding was not continuous during the two days mentioned.

Dr. Atkinson said that the occurrence of placenta previa in two succeeding pregnancies was exceedingly rare. Nor was there any reason to expect such a complication to occur again because a patient had once suffered thus.

In the only case that he had seen in which there was placenta previa, it was almost completely central. There were no contractions. Ergot appeared to have no effect, although freely administered. He tore through the placenta, put on the forceps, and thus delivered. The child had been dead for some time. The woman did well.

#### TREATMENT OF BUBOES.

I pass on to consider the treatment of the different kinds of bubo; viz., the multiple bubo, the bubon d'emblée (that rare form of bubo where there is no chancre, but where the poison is absorbed through an unbroken cuticle and makes its first lodgment in the inguinal glands), the virulent bubo, and the sympathetic bubo.

*The Multiple Bubo, which follows an infecting chancre.*—No local treatment is of the slightest service in this class of cases, nor need this be a matter for regret, as the internal (or other) exhibition of mercury is all-powerful in removing the inguinal adenopathy.

*The Bubon d'Emblée.*—Precisely the same remarks apply to this as to the first kind of bubo.

*The Virulent Bubo, which accompanies a soft chancre or sometimes a mixed sore.*—As this variety of bubo tends to suppuration, it is best to hasten the progress thitherward by warm fomentations and poultices, and by encouraging the patient to take exercise. The abscess should not be opened on the first detection of deep fluctuations, but suppuration should be allowed to proceed until the skin is somewhat thin and glazed; then the abscess should be opened freely along the entire length of the gland, and the cavity washed out night and morning with tinct. iod. one part and water two parts, and dressed afterward with lint soaked in an astringent lotion. Exercise should now be very restricted, and any sinus which appears should be at once followed up and treated like the large abscess.

The blue overhanging edges of the incision, which are such common features in this form of bubo, are best destroyed with some caustic—none better for the purpose than potassa fusa cum calce. It not unfrequently happens, however, that the gland itself assumes all the characters of a suppurating chancre; and if this should prove to be the case there is no application so generally useful as iodoform.

It is a good plan to give a grain of iodoform internally three times a day, combined, if other things

indicate it, with a grain of reduced iron, while using it as a local remedy.

*The Sympathetic Bubo.*—This bubo may accompany a gonorrhœa or a soft chancre, or may be caused by a tight boot, or it may be more directly traumatic in origin, but the treatment is not affected by the diversity of its cause. This variety of bubo is, in a word, a simple adenitis, sometimes terminating in resolution, sometimes going on to suppuration, and the object of the treatment at first is to induce resolution, and the next, if this prove impossible, to promote suppuration. The best mode of proceeding with these cases is to apply a compress of lint soaked in a strong lead and spirit lotion, and kept in firm contact with the groin by a tightly-drawn spica bandage or well-fitting truss. Rest is also an essential element in the treatment.

If, in spite of this, the gland continues to enlarge, though without much pain or any throbbing, I am in the habit of injecting five or six minims of the simple tincture of iodine into the substance of the gland, and generally find that this treatment either succeeds in dispersing the tumor, or so accelerates suppuration as to make quick work of the resultant abscess. In cases where the gland becomes very large and hard, this plan is better than mere blistering, or than the application of a solution of the mercuric chloride to a previously-blistered surface. When suppuration has taken place the abscess should be freely and early opened, and the patient enjoined to rest, and to syringe the sac of the abscess twice a day with some stimulating lotion. The injections of iodine may, if necessary, be repeated twice or thrice a week.—*S. M. Bradley, in Dublin Medical Press and Circular.*

#### BLOOD-LETTING IN URÆMIA.

A paper appeared recently in the *Glasgow Medical Journal*, by Dr. Robert Kirk, of Glasgow, on uræmia, with cases of scarlatinal drowsy, treated by blood-letting. The first case was that of a young man who, after a slight attack of scarlatina, was attacked with frequent convulsions. The attacks became very strong, and nearly continuous, with tonic and clonic spasms, and occasional stertorous breathing. In one of these there were violent convulsions, unconsciousness, foaming at the mouth, with dilated pupils. He was at once bled from the arm to sixteen ounces, three men holding the patient during the operation. The fits ceased almost immediately, a sort of comatose sleep alone remaining. This was about 8 P. M. Next morning, at six, he awoke, said he felt well, and took some food. The wound, moreover, had burst open, and he lost a good deal more blood, but his pulse was of the natural standard, and he was not the worse for the loss he had undergone. Diuretics were then administered, which brought away plenty of albuminous urine, loaded with lithates; he was discharged at the end of six days, and when seen six months afterwards, he was in the best of health, and not at all anæmic. Another case—a very bad one—appeared to show the good effect of local blood-letting

in acute pulmonary œdema. Again a boy of ten is seized with violent convulsions, with only brief intermissions. Ordinary treatment is of no avail. He is bled from the arm to twelve ounces. The fits immediately cease, and sleep supervenes, from which he wakes up apparently well, the urinary secretion is restored, and his health rapidly established.

In every case in which Dr. Kirk has tried blood-letting in scarlatinal drowsy, it has proved eminently successful; and he would not hesitate to try the remedy again, "in preference to a farrago of sudorifics, diuretics, and purgatives, having always the lancet in reserve in case of danger." Nor is he quite singular in his practice for it appears that Dr. Bramwell, of Perth, published in the *Edinburgh Medical Journal*, of July, 1875, a notice of thirty-two cases, of scarlatinal drowsy, in which he frequently had recourse to general abstraction of blood, with the result of only one death out of the thirty-two cases and that a case which was seen too late for treatment to be of any service. Among his cases were some of both pulmonary œdema and convulsions, in the treatment of which he resorted to depletion, with unequivocal success, whether it was practiced at an early stage, or not until those complications set in. He also generally found, as did Dr. Kirk, that free diuresis set in forty-eight hours or less after blood-letting.

#### OPHTHALMIA NEONATORUM.

This is an inflammation of the eyes which should be, and probably is, of the deepest interest to the general practitioner. It requires no very great stretching of the imagination to fancy, if one has never seen, the anxiety of the mother when she sees the quantity of discharge which usually escapes from between the eyelids. Purulent ophthalmia is a serious affair in adults, and how much more so does it not seem in the delicate new-born baby. Yet it is a disease easily controlled by proper treatment, and not necessarily fatal to vision. It usually shows itself about the third or fourth day after birth, which fact is pretty fair proof that it is provoked by inoculation. It may, however, and frequently does ensue from exposure to bright light, from the contact of soap and water while washing the infant, from want of cleanliness, and from cold air.

At the commencement of the disease the edges of the lids are slightly agglutinated, the lids are a trifle swollen, their borders red, and there is a slight catarrhal discharge. These symptoms are sometimes stopped at this point, causing simply a catarrhal ophthalmia; but it is necessary to remember that such symptoms are the usual precursors of the purulent form, and to watch them closely. The disease usually attacks one eye first, and very soon after the other becomes affected. The conjunctiva becomes swollen, and on opening the lid there escapes a citrine-like liquid containing flakes of mucus and pus. Unless modified by proper treatment, the swelling of the lids increases, as does also the purulent secretion, and too frequently the cornea becomes affected, and either

vision is lost or unsightly white spots are left as the result, producing more or less impairment of sight.

In every case of purulent inflammation of the conjunctiva it is necessary to pay particular attention to the state of the cornea. If the swelling of the conjunctiva and the lids renders it impossible to separate the lids with the fingers sufficiently to examine the cornea, the lid-elevators must be used. The treatment of ophthalmia neonatorum must be guided by the character of the secretion. If the secretion is of actual catarrhal type, cleansing with warm milk and the use of a mild stimulating lotion, such as sulphate of zinc (one to two grains) and water (one ounce), every six hours, will usually cure the trouble in a few days. If, however, we have to deal with a purely purulent type of the disease, more energetic treatment is called for. The edges of the lids must be kept anointed to prevent the retention of the discharge in the conjunctival sac by the agglutination of the edges of the lids, and the lids everted, cleansed of the secretion, and, according to the gravity of the case, either cauterized with the mitigated stick of argenti nitras, or a solution of the nitrate of silver (five grains to one ounce), used morning and evening. I do not approve of washing the eyes every fifteen minutes or every hour, as I believe the irritation is increased thereby; and if the gluing together of the lids is prevented, as it certainly will be by properly anointing their edges, the secretion will escape, and can be gently wiped away externally. I have known the disease to be prevented from getting well by the over-anxiety to keep the conjunctiva cleansed of the discharge. It is usually a number of days, even when neglected, before the ocular conjunctiva or cornea becomes affected, and with proper care and treatment they seldom participate in the inflammation. I do not hesitate to say that an eye never should be lost from ophthalmia neonatorum, though I am sorry to say many are.

If the cornea is affected, the cauterizations or applications of the solution of nitrate of silver (five grains to one ounce) should be continued to the everted lids, care being taken to wash off the excess of silver, and a solution of sulph. atropia (four grains to one ounce) instilled every two or four hours. Sometimes it is necessary, particularly if the corneal trouble is spreading, to make paracentesis of the anterior chamber; or if a prolapse of the iris has taken place, to snip it off with the scissors. Complications of the above character, however, only happen from neglect—*Eugene Smith, M.D., in Detroit Medical Journal.*

#### BORACIC ACID OINTMENT.

Mr. Arthur W. Bateman calls attention (*British Med. Jour.*, Sept. 22, 1877) to the value of Professor Lister's boracic acid ointment as a dressing for wounds in general. During the last two years, he has been in the habit of using it, and has concluded that it is preferable to either dry lint or other dry application, and also to water-dressing. For wounds, when hemorrhage has been stopped, or can be caused

to cease by the application of light pressure, it is very useful; for, owing to the smooth waxy consistency of the ointment, the dressing does at all not adhere to the edges of the wound, nor to the clot between its margin. The dressing can, therefore, be removed and replaced as often as is advisable for the examination of the wound, without disturbing the healing process. Any discharge that forms can also easily escape between the layers of ointment and the skin around the wound. The ointment is thus preferable to dry lint, except in those cases where there is a great amount of oozing, when the dry lint and blood may act beneficially by forming an artificial scab. Water-dressing may be regarded as an efficient mode of poulticing, and wounds that do not require poulticing can be better treated with the ointment than with water-dressing; for prolonged water-dressing generally irritates the skin round the wound, which becomes sodden and sore: while the skin remains comparatively healthy under the ointment. The smooth surface of the ointment is less liable to destroy by friction or otherwise damage the surface of the granulations than is the lint. The ointment never sticks to the surface of the wound, and no pain or injury is caused on removal of the dressing. Another great advantage is that, owing to the antiseptic quality of the boracic acid, the dressing need only be removed every second or third day, unless the discharge be profuse. Thus time is saved with hospital patients. Mr. Bateman has noticed that small lacerated wounds—for example, of the fingers—will keep perfectly sweet for twenty-four hours under the ointment even in tropical climates, and here they keep quite sweet for two days whereas water-dressing generally requires to be reapplied every twenty-four hours. In applying the ointment the dressing should extend far beyond the edges of the wound on to the surface of the surrounding skin, so as to interpose a considerable antiseptic interval between the margin of the wound and the limits of the dressing. This is the more important in proportion to the amount of discharge.

#### INTRODUCTION OF THE HAND INTO THE RECTUM

In the St. Bartholomew's Hospital Reports, quoted by the *American Medical Journal*, Mr. W. J. Walsam offers the following propositions, deduced from the examination of four cases on the living body and twelve experiments on dead bodies:

1. That the hand, if small, can be introduced into the rectum of both male and female without fear of rupture of the sphincter or incontinence of feces.
2. That the dilatation of the sphincter should be very gradual, five minutes at least being allowed for its accomplishment.
3. That no pain or inconvenience is experienced by the patient as an after-result of the operation.
4. That when once through the sphincter, the windings of the gut should be followed very cautiously by a semi-rotary movement of the hand, and by alternate semi-flexing and extending the fingers.
5. That in many cases the hand can be passed into the sigmoid flexure, and possibly, in rare instances, into the descending colon.



6. That should the hand meet with a feeling of constriction about the junction of the first and second pieces of the rectum, no force on any account should be used to overcome it, as this can only be accomplished by rupturing the peritoneum, which is here reflected from the intestine.

7. That this method of investigation is of use in detecting a stricture high up the rectum or in the sigmoid flexure of the colon, but that a stricture below the descending colon may exist although the hand may be unable to discover it.

#### A NEEDLE FOUND IN THE BRAIN.

At a meeting of the Pathological Society of Philadelphia, (*Med. Times*) Dr. H. Lenox Hodge reported, that upon removing the calvaria of a subject in the anatomical rooms of the University of Pennsylvania, a sewing needle of medium size was found lying on the right hemisphere of the brain, nearly parallel to the superior longitudinal sinus, about an inch distant from it, and about an inch and a half behind the fronto-parietal suture. The point and the eye of the needle were both unbroken. The point was directed backwards. The needle was much oxidized, and attached to the arachnoid surface of the dura mater by old bands of lymph near the larger extremity of the needle.

No history of the cadaver, an adult male, could be obtained.

The needle appears to have given rise to no important changes, and had no apparent connection with the cause of death. The man seems to have died of phthisis.

It is a matter of interest how the needle reached this position.

Other methods might be suggested, but it is most probable that it entered the anterior fontanelle during infancy, and thus passed to the place where it was found.

Dr. Hamilton Osgood asked what was the appearance of the needle.

Dr. Hodge replied that it was black and tarnished.

Dr. Sinkler thought it most likely that it had entered the fontanelle during infancy, as by no muscular contraction could it obtain the position in which it was found.

Dr. F. P. Henry said his experience went to show that instead of corrosion of needles long buried in animal tissue, there was an actual addition of new material. A short time ago he had removed with great difficulty a needle from the biceps muscle of a girl. It was three times the thickness of an ordinary needle, very rough and uneven, and covered with a hard mineral-like deposit, to which was owing the increase in thickness.

Dr. Wilson recited the case of a sewing-girl who was said to have swallowed a paper of needles, many of which were removed from different parts of the body. These were all smooth, but blackened and tarnished. He had recently removed from the foot of a boy a needle which had been imbedded four months. It was simply tarnished.

Dr. Sinkler had removed a needle from a foot after it had been there imbedded for three months. It was smooth and blackened, but not corroded. He placed it in his pocket-book, and on examining it after a few weeks he observed that the rusting process had taken place.

Dr. Richard A. Cleemann said that he had made use of the fact that a needle after being imbedded in tissue for a certain length of time becomes tarnished. He had extracted a fragment of needle, and was anxious to determine whether it was all that entered the foot. The broken end was tarnished. He fractured the needle, and observing that the fractured ends presented the usual steel-like lustre, he concluded that he had removed the whole fragment. Had he broken it off, the fractured end of the removed portion would have been bright.

#### COLOCYNTH FOR ABDOMINAL PAIN.

Dr. James I. Tucker writes to the *Chicago Medical Journal and Examiner*: "I state without fear of successful controversion that colocynth will allay the pain caused by excessive peristaltic action better than any drug in use, not excepting opium, providing it be used in the proper dose. I refer to simple but nevertheless distressing idiopathic pain, so to speak; pain due to excessive stimulation of the nerves engaged in keeping up the harmonious rhythm of the vermicular movement of the bowels. In such cases I employ not the solid extract, but the *tincture*; and I use the *tincture* in such small quantities that I expect to meet a large amount of incredulity growing out of *a priori* conclusions. But why, pray, if ipecac in minute doses can allay nausea and vomiting, may not colocynth in small doses allay the very griping which in large doses it is capable of producing? I use only just so much of the *tincture* as to render the excipient—generally water—slightly bitter. In teaspoonful doses, repeated *pro re nata*, I have seen the most speedy relief from very violent griping. Now, since therapeutics is the ultimate aim of classical or humanitarian medicine, I hope much more attention will be paid hereafter to the hitherto unutilized virtues of drugs which have been supposed to have but a very limited applicability. It will be found that our methods of ascertaining the therapeutical possibilities of drugs are lamentably meagre, and without honest original research we bow too willingly to the shrine of supposititious authority. The truly medicinal properties of many of the drugs in common use lie latent, dormant, and neglected, ready at any time to grow and bud and blossom, like the germinal principle which was at last discovered in the wheat grains found in the Egyptian catacombs. It is the duty of every practitioner to contribute the results of his experience to the common store of knowledge; not, indeed, to tell us what misery he can occasion by doses of this or that, but how far this or that has contributed, by a careful artistic application, to alleviate the sufferings of mankind. The basis of observation has been hitherto very inadequate; but the time is com-

ing—nay, is already here—when the action of drugs may be ascertained with mathematical accuracy. I mean by the neurological method of therapeutics. To this fact, and to the other virtues of the bitter cucumber, which are an illustration of this fact, I now endeavor to call the attention of the medical profession. Therapeutics resting on a neurological basis is to be the therapeutics of the future.”

#### INSTANTANEOUS CURE OF HYDROCELE.

Dr. MACARIO, of Nice, contributes to *L'Abcille Médicale* some interesting cases treated by electro-puncture. In the first case, two needles were plunged into the tumour, one at the base and the other at the apex. On connecting the needles the pain was such that the patient refused to continue treatment. Nevertheless, the next day the liquid had disappeared and had not returned at the end of nine years. In the next case absorption was even more rapid, a tumour the size of two fists, dating from fifteen months, having vanished in the evening after a single sitting of one minute. Dr. M. has also reported to the Institute several other cases treated, some by electro-puncture, others by simple induced currents, and it is more than fifteen years since he first recommended this method, which has been followed by several others with considerable success.

#### FETID FEET.

As a remedy for this noi-ome affection Dr. Rumbold recommends bathing the feet in warm water for fifteen minutes just before going to bed. The water should be kept as warm as can be borne, by the addition at intervals of boiling hot water. After the feet are dried and thoroughly rubbed with a coarse towel, an ointment composed of salicylic acid and bromide of potassium, each five grains to the ounce of vaseline, should be applied with considerable friction. Then the feet should be covered with a pair of cotton stockings well warmed.

In an article in the *Revue de Théraputique*, it is stated that an immediate remedy is found in washing the feet with a solution (1 in 100) of chloral, and keeping them enveloped in compresses wetted with the same solution. Results as satisfactory, Dr. Burdon has claimed to have been obtained by the employment of a solution (commencing with 3 in 1,000) of the permanganate of potash. Dr. Berthold also indicates an efficacious method which is less troublesome than that of bathing with solutions. It consists in powdering the interior of the patient's socks with a powder composed of one part of salicylic acid and five of starch. This is, too, an excellent mode of treating the local sweating which in fat persons takes place between the scrotum and the thighs, and if not arrested leads to a troublesome eczema and its accompanying pruritus.—*Chicago Med. Examiner*.

#### ointment FOR PILES.

|                                |            |
|--------------------------------|------------|
| Powdered opium.....            | 30 grains. |
| Tannin.....                    | 1 drachm.  |
| Carbolic acid.....             | 15 drops.  |
| Oil of tobacco.....            | 10 “       |
| Solution of subacetate of lead | 20 “       |
| Simple ointment.....           | 1 ounce.   |

Mix intimately. To be used morning and night.

#### VERATRUM VIRIDE.

Dr. John S. Lynch considers that the physiological actions of *Veratrum Viride* are two-fold, nauseant or emetic and vaso-motor stimulant or arterial sedative. These two effects are due to the presence of alkaloids named veratroida and jervia. The first named acts as a local irritant, an emetic, sometimes a cathartic, and, like all nauseants, a depressor of the circulation. The second, jervia, without producing either vomiting or purging, slows the pulse, probably by increasing arterial and capillary contraction, but without diminishing the force of cardiac systole.

The quantity or dose required to produce the full effect of the drug varies very greatly in different individuals, and beyond a certain point increase of the dose is not attended with increased effects. The writer says he has frequently exhibited drachm doses of the tincture without producing more effects than witnessed from five or ten drops.

Apart from its influence as an arterial depressant, *Veratrum Viride* has no anti-pyretic effect whatever. It is only, therefore, in those diseases in which the heat bears a distinct ratio to the rapidity of the circulation, and in fact depends upon increased oxidation merely that this remedy can be expected to exert any anti-pyretic effect. In purely inflammatory diseases it becomes the most potent, reliable and effectual remedy known to medical science. By its use a local inflammation which has produced a constitutional or sympathetic irritation can be restricted to its original locality, and the dangers of collateral hyperæmias and extension of inflammatory invasions completely prevented. In every condition, whether acute or chronic, in which there seemed to be danger of cardiac exhaustion and conservation of the strength of that organ is indicated, veratrum may be used without disappointment in the result. The writer does not claim that it will cure inflammation of any kind, nor does he know of any medicine that will do so.

Like digitalis, veratrum viride, may be exhibited in diseased conditions which call for its use in large doses, and has the peculiarity of producing its effects suddenly, whether the effective dose has been large or small, and the effect produced does not seem to bear any relation to the amount taken. “Thus,” says Dr. Lynch, “I have witnessed a sudden slowing of the pulse, with vomiting and prostration, to as great an extent from five or six drop doses as when ten and even twenty times the quantity had been used.”

The nausea and vomiting so frequently noticed accompanying the action of this remedy may be

entirely prevented without in the least modifying its action upon the heart by combining it with some one of the preparations of opium. Another means of modifying the local effect of the medicine upon the stomach is the exhibition at the same time of moderate doses of carbonate of sodium or potassium.

Veratrum cannot be combined with alcoholic stimulants in any form, since these are physiologically antagonistic to it as far as its action upon the circulation is concerned.—(*Trans. Med. and Chirurgical Soc., Maryland.*)

#### TREATMENT OF AMENORRHOEA.

In many cases you will not succeed in establishing menstruation, and indeed you should not endeavor to do so by any direct or local treatment. You should remember that menstruation is a function performed during a part of life only, and that it is not necessary either to life, health, or fertility. In all cases attend first of all to the general condition. No efforts should be made at establishing the monthly hemorrhage until health is more or less good. When serious organic affections, as phthisis, Bright's disease, etc., are present the treatment should be exclusively directed to their cure, and no attempt should be made to induce menstruation. When the general health is good even, you should refrain from direct treatment of the amenorrhœa if there be no efforts at menstruation, for by partial success you may render intolerable a life which otherwise would have been free from suffering. These rules are applicable to all cases of amenorrhœa.

Let us now briefly refer to the different forms of amenorrhœa.

*Menstruation is and always has been absent.*—The great majority of cases of this class which will come under your observation will be young girls between sixteen and twenty years of age. Many of them will suffer from anæmia and disorders of the digestive organs. Your first object should be to treat these conditions, and by the time they are cured menstruation will probably be established. Time will indeed come to your help. Such cases are instances of late or tardy evolution of the generative organs. The form and figure may be well developed, but the uterus grows slowly, and the treatment consists in waiting and adopting all means that favor its growth. There will, after all, remain a few—very few—in which the discharge will not make its appearance. In these it will be found that the uterus is small, and the best treatment is non-interference.

*Menstruation is scanty or irregular.*—If it be due to an undeveloped condition of the uterus, and if it be accompanied by no pain, the general health being good, it requires no special treatment. General means which favor physical development, as exercise of all kinds, may be recommended. If the scanty or irregular menstruation be accompanied by pain, it comes under the head of dysmenorrhœa, where I shall speak of it. If the uterus have obtained its full size you will in almost all cases—in all cases that require treatment—find a disordered state of the

general health. The most common condition is anæmia. In such cases you should regulate the bowels, for there is generally constipation. Give iron, iodine, salines; good diet, fresh air, and exercise in the open air are essential. Exercises of all kinds are good—riding, walking, swimming, dancing. If the monthly molimen be present, emmenagogues may be prescribed. Emmenagogues should never be administered when indications of ovarian and uterine action are absent. The medicines supposed to have a direct action in bringing on the menses are numerous, but few of them are of much or even of any value. The best are electricity, aloes, and the stimulating diuretics—nitrous ether, spirits of juniper, and oil of turpentine. Hot hip-baths for five or six nights in succession before the expected return of the molimen are useful. Guaiacum, ergot of rye, oil of savin, cantharides, have proved successful in the hands of some. Dr. Atthill recommends the warm hip-bath for eight or ten evenings in succession before the expected time.

*Suppression of the menses.*—When the suppression has taken place suddenly during a menstrual flow the patient should have a hot bath, go into a warm bed, and take a dose of Dover's powder. A stimulating diuretic or a diaphoretic should be at the same time prescribed. Should fever, heat in the skin, vomiting, pain in the abdomen, and symptoms of local inflammation or of general peritonitis set in they should be treated irrespective of the suppression. If the flow is not re-established, the case becomes one of chronic suppression.

*Chronic suppression.*—The general health should be attended to, and if menstrual molimena be present they should be encouraged and efforts made to establish the flow by the means already enumerated. If molimen be absent, you should limit your aid to the treatment of the general health.—*Dr. John Wilson in London Lancet.*

#### CLINICAL LECTURE.

Delivered at Bellevue Hospital, New York, by Abraham Jacobi, M.D., Clinical Professor of Diseases of Children, in the College of Physicians and Surgeons, New York. 1. Mammitis, Aphthæ and Diarrhœa. 2. Catarrhal Pneumonia.

**GENTLEMEN:**—The child that I now show you is three weeks old, and there are a number of conditions present that remind you of the newborn state. On examining the chest of the little patient you discover that the two mammae are somewhat red and swollen. You sometimes find this condition occurring when the infant is but a few days old. On squeezing the breasts, a fluid exudes, and the common rule in treating this affection is to press the liquid out, but this is a great mistake, as mastitis is made worse by handling the mammae. The liquid that exudes is milk, which compares very closely with the milk of a nursing woman. Simon, the French chemist, after a careful analysis, showed that this kind of milk did not differ much from

mother's milk, with the exception that the latter contains a larger proportion of caseine.

This affection of the breasts in young infants does very well when left alone. The result of squeezing is usually inflammation and suppuration, which ends in the partial destruction of tissue. The tissue destroyed is never repaired, and the breast does not attain its proper growth. I know several adult women who have a breast only on one side, and the absence of the other is due to the loss of tissue during infancy. A simple application of glycerine or oil is all that is required in most of these cases. Something else, however, may occasionally be resorted to with advantage. The external application of iodide of potassium is frequently useful. The salt may be dissolved in water or glycerine, and applied to the part. In this form it is taken into the skin in a much better way than when ointments are employed. Ointments made with fat in most cases are of absolutely no use, as they act only on the surface or cutaneous nerves. The solution in glycerine penetrates the skin much better and more rapidly, and this may be proved by the fact that, when an ointment is used, the iodide is not found in the urine for several days, but, after using glycerine, the salt may be detected in twenty-four hours. A better mode still of getting the medicine into the system is by using oleic acid. This substance penetrates the skin with great facility and rapidity, and whatever is soluble in it may be administered in this way.

Quinine dissolves in oleic acid, and a few hours after its exhibition may be found in the urine. It may be given by this means, if there be any difficulty in introducing it by the stomach or rectum. There is only one drawback in the use of this agent. Oleic acid is itself an irritant, and may make the skin red and inflamed. A few pustules may form, and then not so much of the medicine will be absorbed. Carbolic acid may be mixed with oleic acid, and erysipelas may be treated by this method. Oleic acid penetrates the skin readily, and whatever it contains goes along with it. With children, use the proportion of about one to sixty. In this case before us we shall use one part of iodide of potassium in four of glycerine, spread on lint, and laid on the mammae.

On looking more closely at this baby, you perceive a slight erythematous eruption. It is wrapped up in a hard flannel, and this in itself is often enough the cause of an eruption of this nature in new-born children. You see the same thing happen when new diapers are used, that have not yet been washed. On examining the umbilicus, we find it to be in good order, and it has the appearance that properly belongs to it in a child of three weeks of age.

Looking at the lips, we find that they present a much redder color than normal, and on inspecting more closely we discover that they have been deprived of their epithelium. On questioning the

nurse we learn that the child does not swallow well, and we will probably find that the mouth is in a similar condition, which would naturally cause a difficulty in deglutition. Instead of the mouth having its normal coating it looks very red. Upon the palate there is a white patch, looking very much like an ulceration. We have, then, a condition in which the epithelium of the lips, tongue, cheeks, palate, etc., is absent, and besides this, a spot that looks like an ulceration. It is not an ulcer, but the opposite—an infiltration. There is no loss of substance but, on the contrary, a slight elevation. Every loss of substance is produced by an inflammatory condition. The muciparous follicles swell and become raised above the level of the mucous membrane. Vesicles form, which burst, and then ulcerate. But such is not the case here. The white color cannot be due to a vesicular inflammation of the muciparous follicles. It is a fibrinous exudation, and these spots have received the name of aphthæ. Usually the vesicular disease that I have described is called aphthous stomatitis, but the only condition which should properly deserve this name is that in which there exists a fibrinous exudation. The other should always be called follicular stomatitis.

Now, what are we to do in this case? We must prevent the disease from getting worse, and by doing this it will get well spontaneously. Where the infant is fed so often, the cause must be removed. The milk that remains in the mouth after nursing becomes rancid and acid, and keeps up the irritation. A large number of the diseases of the mouth in infants is caused by want of proper cleanliness in not washing out the mouth after every nursing. The milk turns acid immediately, and consequently produces an irritation. In this case I should propose, then, to wash out the mouth carefully, and use a solution of soda or chlorate of potash. Simply introduce a few drops into the mouth frequently, and have it cleansed after every feeding or vomiting.

There is still something else in this baby that must be looked to. We learn that it has some diarrhœa, and that the mother suffered from cellulitis, with fever, while she nursed it. In these cases the amount of milk is usually changed. It contains less water, but, as a rule, the child may nurse as long as the strength of the mother holds out. Nature allows of a great deal of latitude in the mother as regards the change of milk. It is very much of a question whether a change of milk in the mother was the cause of this infant's diarrhœa. It has had only six to eight passages in the twenty-four hours, but they looked a little greenish. This trouble can be removed by a few doses of grey powder. However, the nursing may be stopped; and, if the child be fed on cow's milk, boiled and skimmed, and mixed with a little farinaceous substance, or gum arabic, the disease will get well. I should advise, at the same time, an anti-fer

mentative, such as calomel. A dose of opium, about 1-5 of a grain of Dover's powder, every few hours, might be useful. An antacid might also be used with advantage. There are the carbonates of lime, potassium, sodium and magnesium. In intestinal catarrhs we must distinguish between these salts. When the carbonates of sodium and magnesium are taken into the stomach, they will form organic salts, which are purgative. We should therefore choose potassium or lime. Chalk, then, would probably be the most suitable.

#### CATARRHAL PNEUMONIA.

The little girl that I now present to you has a history of catarrhal pneumonia. I shall not now go extensively into the history of this disease, but simply state that catarrhal, or lobular pneumonia generally comes on after an attack of bronchial catarrh. As a rule it will spread to both sides of the chest, and we shall have both lungs involved. We must likewise expect it to spread over a number of lobes. We may, moreover, anticipate a new attack in distant parts, when the old spots get well. This follows from the well known tendency of catarrhal inflammations to spread.

At the last examination of this little patient it was found to be worse on the left side, but now there is evidence that it has spread on the right side also. It is possible that these spots of catarrhal inflammation may be older than those on the left side, but were not noticed, because the other side was worse. We find increased and coarse respiration on auscultation, and dullness on percussion. On the other side we find some dullness, coarse respiration, and a few rales. On the right side it has undergone resolution in places. The respiration is diminished, which shows that a larger portion has become infiltrated, or that there is something between the ear and the lung. If there were increased infiltration, there would be bronchial respiration, but its absence would show a pleuritic effusion. On the right side, then, where there are considerable dullness, diminished respiration, and resolution rales, there has been pleuro-pneumonia.

And now we will take the temperature, to see whether we have to deal with a disease that is getting well, or whether there is an additional disturbance. This is often the only indication we can get of the progress of the disease. On looking at the thermometer we find the temperature to be 101° F. Thus, there is certainly not a great elevation of temperature, as it is only one degree above the normal heat in the rectum, which, I may say, in passing, is the only place where the temperature of children should be taken.

The disease is still in progress, but there is no new inflammation going on. An elevation of temperature always means some active influence at work in the blood and nervous system. It

may be the result of the disintegrating process taking place in the inflammatory material. There must have been a large amount of exudation in this case, which is now undergoing granular and fatty degeneration, and must be taken back into the blood. This causes the increase of temperature, and in many cases we often see this elevation continuing for weeks during the progress of this process.

The question now is, what to do. A chronic condition of this description, when not relieved, may be a cause of trouble for life. It may give rise to emphysema and consumption. The fever will take care of itself when the elimination is completed. We must see that the patient has good nourishment, and sometimes stimulants. Fluid or semi-fluid food should be given with, perhaps, a few drachms of brandy.

A patient suffering with, or recovering from, this disease may contract diarrhoea on account of the obstruction of the circulation. Beef tea contains a large quantity of salts, and when you give it pure and simple, that alone is sufficient to loosen the bowels. The constant result of giving beef tea in summer diarrhoea is to increase the disease. If you do give beef tea, mix with it something to counteract the effect of the salts.

As there is so much tendency to diarrhoea in pneumonia, do not give anything that has a tendency to loosen the bowels. An excellent plan is to give eggs, soft-boiled or raw; where the child cannot tolerate them, give the white raw, mixed with gum or barley-water.

As a stimulant we may use whiskey, or a quarter of a grain of camphor in water, or alcohol every two or three hours. Syrup of the iodide of iron is a very eligible preparation, as it is most digestible, and indeed often improves digestion, on account of its decomposition in the stomach, the iodine acting as an anti-fermentative. After some time, when the iron has done its duty, it may be well to give arsenic. It is one of the best nutrients we have, and in anæmic conditions it will not only strengthen, but fatten. It is an excellent remedy in all cases of anæmia and weakness.

In good weather, the child should be taken out, so as to have plenty of fresh air. In the meantime the temperature should be watched very carefully, to see how the progress of absorption is going on.—*N. Y. Hospital Gazette.*

#### AN EXCELLENT AND ELEGANT FORMULA FOR PRESCRIBING GALLIC ACID.

- R. Acidii gallici.....1 drachm.  
Glycerinæ.....1 ounce.  
Aque bullientis.....5 ounces.  
M. A tablespooful *pro re nata*.



# THE CANADA MEDICAL RECORD

## A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPELL, M.A., M.D. L.R.C.P., LOND

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MONTREAL, NOVEMBER, 1877.

## TO OUR SUBSCRIBERS.

We are really almost tired asking our subscribers to remit the amount of their past due subscriptions, and confess to more than disappointment at the response to our repeated appeals. We have rendered accounts to all up to the close of Volume 5. *Please remit the amount at once.*

In our August issue we stated that negotiations were in progress between the University of Laval, Quebec, and the L'Ecole de Medicine et Chirurgie de Montréal, affiliated with Victoria College, Cobourg, with a view of the latter becoming a branch of Laval University, and, of course, ceasing its connection with the Ontario College. The paragraph caused considerable talk, and various indirect means were taken to have us contradict the statement, but we invariably declined to do so, for our information was derived from a quarter that was not likely to be mistaken. Without directly naming this journal, a paragraph appeared in various Montreal papers early in September, denying the report concerning this change of allegiance, and, if we are correctly informed, the authorities of Victoria College, at Cobourg, received official intimation from their Montreal Faculty to the same effect. After so much denial, and a large amount of wordy wrath upon our unfortunate head, for giving currency to such a report, one would have expected that the relations existing between the *present* Montreal School of Medicine and Victoria College, would have had an almost endless lease. To any who have held such an opinion the announcement which recently appeared in a telegraphic despatch from Quebec, "that Laval University intended to open a branch in Montreal," must have been anything but re-assuring. To ourselves it was simply information, shewing that negotiations, *which we knew* were in progress, had been concluded satisfactorily, at all events

to those engaged in them. Now, who were those engaged in getting this University to take this step. In our August number we stated it was the Montreal School of Medicine, and while, in the abstract, we still think we were correct in making this statement, we are now assured that, as a Faculty, no such action was taken. Who then were the agitators for this movement? and whose success is going to be more far-reaching, and perchance, annoying, if not more, than would at first sight seem apparent. We answer—certain members of the Montreal School of Medicine. They, we are credibly informed, without any consultation with or authority from the Faculty, determined to secure affiliation with Laval, and have been successful. While we certainly would have questioned the good taste of such conduct, it being, in our opinion, a grave breach of faith, for junior members of a Faculty to work for a new alliance without consultation with and consent of their seniors, beyond chronicling the fact, we would not have said more, were it not that the new alliance is already threatening to involve the other two Medical Schools of this Province in its effects. The University of Laval gives a nine months' course, and in this it is unlike any other Medical School in the Dominion of Canada, for all other schools only give a six months' course, which is in accordance with the law of the Province. But now that Victoria Medical School is about to become a branch of Laval in Montreal it becomes necessary that it should extend the length of its course to correspond with the parent institution at Quebec. All this is very well, and we, of course, clearly see the necessity which exists for the equality in duration between the two branches of the same University. If the elder Faculty of Laval will not diminish the length of her course we presume that there is no help for the newly-affiliated school, but to extend hers. All this, we admit, is plain, but why the law of the Province with regard to the length of the sessions should be altered simply to suit this specific case, and compel the two English Medical Schools of this Province, McGill University and Bishops University, also to give a nine months' course, is not plain; yet, this is what is proposed to be done. We question very much whether some of the gentlemen who a few days ago obtained the required number of signatures among the governors of

the College of Physicians and Surgeons, to a petition addressed to the President, asking for a special meeting to consider this subject, have seriously looked at this question, save and alone from the stand-point of what was best for themselves. To both the English Schools, especially to the elder, McGill University, the matter is one of very serious moment. Drawing fully more than twice as many students from the other Provinces of the Dominion, more especially from Ontario, as she does from Quebec, the enactment of any such change would be a most unjustifiable blow not alone against her, but to the City of Montreal, as a centre of Medical education for the Dominion. We are, therefore, glad to learn, just as we are going to press, that from the very strong remonstrances made by McGill University and Bishops University, against a special meeting of the Board being held, as proposed, next month, to consider the propriety of making the change in the law which we have indicated, it has been decided to hold it over to the regular meeting in May. It is, however, we believe, intended to introduce an amendment, embodying alteration referred to, at the approaching session of the Quebec Legislature, but not to press to a vote, but to leave it over till the Fall of 1878, for final disposal. We have not time to say more upon this subject at this moment, but will refer to it again next month. In the meantime we ask our subscribers in the Province of Quebec to take the matter into their serious consideration. As for ourselves, our mind, after careful consideration, is made up. We shall oppose, by every effort in our power, the proposed change, which we do not consider is called for save as a piece of special legislation in the interest of one Medical School.

#### A LEGAL TARIFF OF FEES.

It is perhaps not generally known by the profession in the Province of Quebec that at last there has been established a scale of fees which is legal, and which, therefore, can be collected in any Court of Justice. The great difficulty which has hitherto attended any attempt at collection by legal means is known by all, the only standard of fees being the opinion of professional witnesses summoned upon both sides. Very often these opinions were as wide asunder as the North and the South Pole, and between them the judge had a difficult matter to decide. The time given by medical witnesses in such cases

has been also a very serious item, and a plaintiff has often had much difficulty, for this reason, to get his account proved. All this trouble and annoyance, we are glad to say, is at an end. Among the medical men who composed the committee that drafted the present Medical Act for the Quebec Legislature last December there was a strong feeling that the time had arrived when the medical profession should, like attorneys and notaries, have a legal tariff of fees. Accordingly there was introduced into the present Medical Act, a clause giving power to the Board of Governors of the College to frame a tariff of fees for the cities and for the country. At Quebec, in September last, a committee submitted a schedule of fees to the Board which was adopted, and they are now legal. We understand that within the past month at Quebec, in a suit, the tariff was submitted as the basis upon which the charges had been made, and the presiding judge, recognizing its authority, gave judgment accordingly. We think that the profession are to be congratulated upon the gaining of this important step and that to the gentlemen who suggested and carried it through hearty thanks are due. As we have heard the tariff objected to because there was only one class, we may say that it was impossible to have a legal tariff divided into classes, as regard social position. The law recognizes no such distinction; no matter to whom rendered, the service is of the same value. It is not of course to be expected that every one, without distinction, is to be charged the tariff rates. It is hoped that as far as possible they will be adhered to. It is however, the *maximum* rate. We propose to have them printed in a form to be hung up in the office. Any of our subscribers who desires a copy can have it sent to his address, post paid, on remitting us 25 cents.

#### TARIFF FOR THE DIFFERENT CITIES.

*Adopted by the Provincial Medical Board.*

September, 1877.

|  |        |
|--|--------|
| Visits from 10 a. m. to 6 p. m. ....   | \$2 00 |
| Visits from 6 p. m. to 10 p. m. and from 7 a. m. to 10 a. m. ....              | 3 00   |
| Visits from 10 p. m. to 7 a. m. ....   | 8 00   |
| A single visit during the day.....   | 5 00   |
| Detention during the whole night.....  | 30 00  |
| Ordinary Office Consultations with prescription ...                            | 2 00   |
| Ordinary Office Consultations with prescription, from 10 p. m. to 7 a. m. .... | 5 00   |
| Consultation and Special Examination.....                                      | 10 00  |
| Consultation with a Practitioner .....   | 10 00  |
| Each subsequent consultation .....   | 5 00   |
| Consultation by letter between Practitioners.....                              | 10 00  |
| Certificate of Ordinary State of Health.....                                   | 5 00   |
| Special Certificate sworn to.....  | 10 00  |
| Certificate of Death .....   | 2 00   |

|  |        |  |        |
|--|--------|--|--------|
| Ordinary cases of Midwifery, with nine days subsequent attendance..... | 30 00  | Introduction of Catheter.....  | 6 00   |
| Turning, application of Forceps or Extraction of the Placenta.....     | 50 00  | Application of Cupping Glasses—Leeches.....  | 2 00   |
| Vaccination .....  | 2 00   | Application of Setons—Moxas.....   | 2 00   |
| Catheterism in ordinary cases .....                                    | 6 00   | Vaccination—Bleeding .....   | 1 00   |
| Each subsequent introduction of Catheter.....                          | 2 00   | Extraction of Teeth.....   | 1 00   |
| Lithotomy and Lithotriety .....  | 500 00 | Introduction of Stomach Pump.....  | 20 00  |
| Ovariectomy.....   | 600 00 | Reducing Dislocation of Thigh (subsequent attendance extra).....                             | 40 00  |
| Setting Fracture of Thigh (subsequent attendance extra) .....          | 50 00  | Setting Fracture of Thigh, subsequent attendance extra.....                                  | 15 00  |
| Setting Fracture of Leg or Arm (subsequent attendance extra) .....     | 40 00  | Setting Fracture or reducing dislocation of the Leg or Arm (subsequent attendance extra).... | 10 00  |
| Reducing Dislocation of Thigh (subsequent attendance extra) .....      | 100 00 | Administration of Chloroform.....  | 2 00   |
| Reducing Dislocation of Leg or Arm (subsequent attendance extra) ..... | 50 00  | Ordinary Office Consultations with Medicine.....   | 2 00   |
| Amputation of Thigh (subsequent attendance extra).....                 | 200 00 | Extraordinary Office Consultations with Auscultation, &c.....                                | 5 00   |
| Amputation of the Leg or Arm (subsequent attendance extra).....        | 100 00 | Certificate of Cause of Death.....   | 5 00   |
| Other capital operations .....   | 200 00 | Ordinary Accouchements, Mileage extra.....   | 10 00  |
| Minor operations .....   | 25 00  | Miscarriage, Premature Confinement, Mileage extra .....                                      | 10 00  |
| Reduction of Hernia by Taxis .....                                     | 25 00  | Turning, Application of Forceps, Extraction of Placenta, Mileage extra.....                  | 20 00  |
| Operation for Strangulated Hernia and attendance .....                 | 500 00 | Tracheotomy .....  | 20 00  |
| Extirpation of the Tonsils.....  | 30 00  | Ovariectomy.....   | 200 00 |
| Tracheotomy .....  | 100 00 | Introducing Uterine Speculum.....  | 5 00   |
| Operation for Cataract.....  | 250 00 | Vaginal Examination.....   | 3 00   |
| Operation for Artificial Pupil.....                                    | 100 00 | Excision of Cancerous Tumors.....  | 20 00  |
| Chloroformisation .....  | 5 00   |  |        |
| An ordinary Visit to the Country, per mile.....                        | 2 00   |  |        |

J. P. ROTROT, M.D.,  
President.

QUEBEC, 27TH September, 1877.

#### OBITUARY—DR. FORREST,

OF ST. CLAIRE, Q.

We very deeply regret to have to chronicle the death of Dr. Forrest of St. Claire, Dorchester Co., Que., which event, not altogether unexpected, took place on the inst. Dr. Forrest was son of the late Mr. Henry Essex Forrest, who after the emancipation of the negroes, sold his estate in the West Indies, and like his cousin, the late Lord Plunkett, invested the proceeds in the Hon. Hudson Bay Co., under the Earl of Selkirk, to whom he was appointed Secretary, but the untimely death of that nobleman proving disastrous to their interests, Mr. Forrest returned to Canada about the year 1795, and resided for many years in the city of Montreal. The subject of our present obituary notice was born in that city in 1803. He studied medicine under the late Dr. Caldwell of Montreal, and Dr. Morin of Quebec. He settled in the former city, where he remained for some time, but subsequently removed to Three Rivers, where, being attached to the detachments of the 100th Regiment and 5th Royals, stationed in that town, he continued there for some years till having become afflicted with deafness, resulting

#### Visits to the Country.

|                                   |          |
|-----------------------------------|----------|
| To St. Johns.....                 | \$ 50 00 |
| " Chambly .....                   | 50 00    |
| " Laprairie .....                 | 15 00    |
| " Longueuil or St. Lamberts ..... | 10 00    |
| " Lachine .....                   | 10 00    |
| " St. Laurent.....                | 10 00    |
| " Côte des Neiges .....           | 6 00     |
| " Petite Côte .....               | 5 00     |
| " Longue Point .....              | 10 00    |
| " Point aux Trembles.....         | 12 00    |
| " Sault au Recollet.....          | 12 00    |
| " Beauharnois .....               | 50 00    |
| " St. Anns.....                   | 30 00    |
| " Terrebonne .....                | 30 00    |

#### Tariff for Country Places.

|  |         |
|--|---------|
| Visit from 6 a.m. to 6 p.m. within one mile.....     | \$ 2 00 |
| Visit from 6 p.m. to 6 a.m. within one mile.....     | 4 00    |
| For each additional mile, during the day.....        | 1 00    |
| For each additional mile, during the night.....      | 1 50    |
| Detention during the whole night .....               | 8 00    |
| Consultation with a Practitioner, mileage extra..... | 10 00   |
| Each subsequent Consultation.....                    | 5 00    |
| Ordinary Certificate of Health.....                  | 2 00    |
| Certificate of Mental Aberration .....               | 5 00    |
| Capital Amputation .....                             | 80 00   |
| Extirpation of Breast.....                           | 50 00   |
| Lithotomy, Lithotriety.....                          | 100 00  |
| Operation for Strangulated Hernia.....               | 50 00   |
| Reduction of Hernia by Taxis.....                    | 25 00   |
| Operation for Cataract.....                          | 50 00   |
| Excision of Tonsils.....                             | 30 00   |
| Amputation of Fingers and other Minor Operations     | 10 00   |

from exposure whilst on a trip to Red River in the North-West, he retired to the quiet village of St. Claire, in the county of Dorchester, where he practiced for many years with great success, till in 1872 he became totally blind from an attack of glcoma, but nothing daunted he continued with unimpaired energy to practice his profession till within a few weeks of his decease. Although totally blind, he took a warm interest in the medical literature of the day. He subscribed to this Journal during the first year of its existence, and continued to take it up to the time of his death, a beloved child reading it to him. Possessed of a kindly heart and a genial disposition—the indefatigable friend of the poor and the distressed, he won the sympathy of all, and the funeral cortege was one of the largest ever witnessed in that neighborhood. He was for years surgeon of the 3rd Battalion Dorchester Reserve Militia, and formerly one of the Governors of the College of Physicians and Surgeons.

— — —  
 PROF. PAUL F. EVE, M.D.

NASHVILLE, TENN.

Professor Paul Fitzsimmons Eve, the distinguished Southern surgeon, died suddenly, while in attendance upon a patient, November 3rd, aged seventy-one years. He was born June 26, 1806, near Augusta, Georgia; graduated at the University of Georgia in 1826; as M.D. at the University of Pennsylvania in 1828, and was a student several years in Europe. He served as a volunteer surgeon in the Polish revolution of 1831. During the rebellion he served as surgeon in the Confederate Army, and for the greater part of his professional career was identified, directly or indirectly, with medical journalism in his section of country. Prof. Eve, as a surgeon, will be best remembered in connection with his remarkable successes as a lithotomist. Of ninety-two bilateral operations for stone eight only terminated fatally. His last notable contribution to medical literature was his address on Surgery at the International Medical Congress in 1876.

— — —  
 PROF. MARTYN PAINE, M.D.

OF NEW YORK.

This distinguished medical *savant*, whose name must be familiar to many in Canada from his work on the Institutes of Medicine, died in

New York on the 10th of November, as the result of a compound fracture of the elbow joint, aged eighty-three years. He was born at Williamstown, Vermont, and graduated at the University of Harvard in 1816. He then settled in Montreal, a fact we believe not known by many, where he continued to practice till 1822, when he removed to New York, in which city he ever after resided. The greatest service done by Martyn Paine to science and humanity was his procuring the repeal of the law which made it a penal offence to dissect a human body. He succeeded in convincing the representatives of the people, assembled in the Legislature of New York State, that such a law was irrational and a perverse interference with the advance of knowledge of the healing art, and despite the tremendous opposition that was raised against him, a law was enacted by which any regularly incorporated medical college in the State of New York was entitled to its share of legitimate material for the better study of anatomy, physiology, and surgery.

— — —  
*Woods' Physician's Vade Mecum and Visiting List.*

We have received from the publishers, J. P. Lippincott & Co. of Philadelphia, a copy of this little work. Although called a *Vade Mecum*, it is intended to be used as a visiting list, its former quality being subservient to the latter. It is certainly a useful little volume, and will be of service to any one who obtains it, saving him many dozen times its actual cost, but we must candidly state that taking it all in all, it is not in our opinion equal to one we have used for the last seventeen years. We fail to see the cause for the multiplicity of visiting lists, which have made their appearance during the last two years. We have not seen one superior to the one first in the field, and we have seen some inferior.

— — —  
*Outlines of Modern Organic Chemistry.* By C. GILBERT WHEELER, Professor of Chemistry, University of Chicago. New York and Chicago: A. S. Barnes & Co., 1877.

This admirable little work, based in part on Riche's "*Manuel*," contains more within its 220 pages than we imagined could be well crowded into such a comparatively small space. The chemistry of the Carbon

compounds, ever spreading its already far extended territory, becomes yearly more difficult to sum up in works of such calibre as this one by Professor Wheeler. He has begun his task by wisely selecting the classifications of Gerhardt and Hoffman, and shows, in well-arranged tables, &c., following this classification, how intimate are the chemical relations that exist between the radicals of a series, and how their different salts are allied to them. The author first deals with the hydro-carbon group, dividing it into six series, and describes the members of each series more or less minutely, according as it has great or little interest to the chemist.

In the table on pages 16 and 17 we would prefer to have the ethers, alcohols, aldehyds and acids, placed in the order given, after the radical from which they are derived, inasmuch as we think they bear a simple and interesting relation thereto, and one which would be more likely to strike the eye of the student than the order which Professor Wheeler has assigned to them. It would also, in our opinion, add to the value of the table had the *names* of the radicals themselves been inserted in the first column. The articles on the alcohols, especially that one on ethylic alcohol, are well written, and give more particulars concerning their preparation, chemical relations and physiological action than one would expect to find in a work which does not profess to enter largely into such matters.

The space devoted to the alkaloids is well taken up in the same way, and not only are the commoner ones treated of at some length, but the rarer of these bodies are referred to, and much that is interesting outside of their strictly chemical properties is noticed.

The different members of the sugar family, the glucoses and glucosides, receive special attention, and while the author wishes to show how, in many respects, they resemble one another, he also points out the essential differences between them. Six pages of matter, (pp. 199-205) are taken up with the consideration of vegetable chemistry, and the author speaks of the "four elements, carbon, nitrogen, oxygen and hydrogen, by means of which Nature forms an infinite variety of compounds by mysterious methods, to which we have not, as yet, the key, but of which synthetical reaction gives us some idea."

Taking it all in all, we are well pleased with Professor Wheeler's book, and we think it will prove of great value, for not only will it serve as a stepping stone to more extended research in such works as

W. A. Miller's Organic Chemistry, but it supplies to the student a want created by the absence of a work which has not been rendered too uninteresting either by dryness of details, by an attempt to include all known organic bodies within its pages or, which is by far more frequent, by a combination of *both* errors. For this reason we predict a large sale for this work, and we can recommend it heartily to all of our readers who wish to obtain a practical idea of Modern Organic Chemistry.

The book is neatly bound, and printed in the clearest type, on thick serviceable paper.

It gives us great pleasure to insert the following letter from Dr. Sayre. It is allowable to say that we did not in any way endorse the charges, but simply stated that the *St. Louis Clinical Record* ought to be sued for libel if the charges were not true. We see no reason for altering this opinion; the object of such suit being forever to put to rest the assertions of the plagiarisms and to teach a lesson in regard to the responsibilities of journalists, rather than to obtain pecuniary damages.

"285 Fifth Ave., New York, Oct. 15, 1877.

"Dr. HORATIO C. WOOD, *Editor Philadelphia Medical Times.*

"DEAR SIR,—In your issue of the 13th October I find you have copied from the *St. Louis Clinical Record* a number of slanderous charges against my character, which are so *absurdly false* as not to require any notice, if they had not been copied into a medical journal which has hitherto been considered respectable.

"You also say that 'these statements, if true, ought to be generally known, and, if not true, ought to subject the editor of the *Record* to damages for libel.' Suing the *Record* would be like the old adage of 'suing a beggar and getting —.'

"I refer you to the following printed records, some of which have been before the profession for years, and by the reading of the same you will see that each and every one of the charges in the *Record* is *wholly and absolutely false*.

"Charge 1st. 'Dr. Sayre's hip-joint splint was invented by Dr. Davis.' To refute this I refer you to the 'Transactions of the American Medical Association' for 1860, pages 505 to 508, and by referring to the Patent Office at Washington 'Synopsis of Specifications,' No. 35,303, you will see that Dr. Davis took out a patent for his splint, which you will observe in the specifications is entirely different from mine, which was given to the profession, as well as its various modifications and improvements, as soon as tested and proved to be useful. I also refer you to my 'Orthopedic Surgery and Diseases of the Joints,' Appleton & Co., 1876, pages 260, 261, to prove the falsehood of this first charge.



"Charge 2nd. 'Dr. Sayre's plaster-of-Paris socket was invented and first applied by Dr. Bryan, of Lexington, Ky.'

"Answer. See my report on Pott's Disease, 'Transactions American Medical Association' for 1876, page 535, where you will see full justice has been done to Dr. Bryan; also *Richmond and Louisville Medical Journal* for May, 1877, page 418; also my recent work on 'Spinal Curvatures and their Treatment by Suspension and the Plaster-of-Paris Bandage,' Smith, Elder & Co., London, Eng., 1877, page 14. Any honest man reading these three references, I think, will never again repeat this charge.

"Charge 3rd. 'Dr. Sayre's method of self-suspension in rotary lateral spinal curvature was invented by Dr. Benjamin Lee, of Philadelphia.'

"Answer. See my work on spinal curvature above referred to, Smith, Elder & Co., London, page 93. For fear that you may not be able to obtain the book in this market at present, I will quote the sentence on page 93, to which I refer:

"The late Prof. Mitchell, of Philadelphia, used to treat cases of lateral curvature by suspending them under the arms, and causing them to suspend themselves by the hands. But Dr. Benjamin Lee, of Philadelphia, was the first person who caused his patients to practice *self-suspension*, by climbing up a rope which passed over a pulley and was attached to the patient's head by straps passing under the chin and occiput.' I think this answers that charge.

"Charge 4th. 'Dr. Sayre's Lectures on Orthopedic Surgery where by Dr. Louis Bauer, formerly of Brooklyn, New York, now of St. Louis.'

"Answer. By referring to the preface of my book on 'Orthopedic Surgery and Diseases of the Joints,' Appleton & Co., New York, 1877, it will be seen that the book was published from stenographic notes of my lectures in Bellevue Hospital Medical College, session of 1874-75, taken at the time by Dr. Wesley M. Carpenter, of this city. Most of the lectures were upon cases presented at the time in the lecture room, and which Dr. Bauer could never have seen, as he at the time lived in St. Louis. The statement is, therefore, too absurd to demand any further notice. The general charge of plagiarism in the last sentence quoted from the *Record*, not being *specific* cannot be *specifically* refuted, but to it I make a general denial.

"Please give this an insertion in your next issue, with such notes and comments as you think proper.  
LEWIS A. SAYRE.

#### PROCEEDINGS OF THE CANADA MEDICAL ASSOCIATION.

This volume has just been issued, and is a most creditable production. As we only received it as we were going to press, we are unable to say more. We, however, again direct attention to the advertisement concerning it. Those who wish to obtain it at the subscription price must at once send their names to Dr. Osler.

#### CLINICAL SURGERY IN EDINBURGH.

Mr. Annandale, F.R.C.S., has been named Clinical Professor of Surgery to the Royal Edinburgh Infirmary, in place of Mr. Lister, who has accepted an appointment at King's College, Hospital London. Mr. Annandale is an excellent surgeon, and is the author of a number of surgical papers.

#### VERMONT MEDICAL SOCIETY.

The annual meeting of the Vermont State Medical Society was held at the Pavilion, Montpelier, Oct. 10th and 11th. The following officers were elected: President, C. M. Chandler, of Montpelier; Vice-President, G. B. Bullard, of St. Johnsbury; Secretary, S. S. Clark, of St. Albans; Treasurer, S. Putnam, of Montpelier; Auditor, D. G. Kemp, of Montpelier; Censors, H. D. Holton, L. C. Butler, S. T. Brooks. The semi-annual meeting will be held at Brattleboro.

Dr. Alfred S. Taylor has resigned the office of Lecturer on Medical Jurisprudence and Toxicology in Guy's Hospital. This appointment was conferred on him by the treasurers and governors of the hospital in March, 1831. He has, therefore, held it continuously for the long period of forty-six years. Dr. Taylor held, also, the office of Lecturer on Chemistry, from 1832 to 1870, a period of thirty-eight years.

#### SCARLET FEVER.

A house agent in London was recently fined five pounds and costs for letting a house in which three children had been suffering from scarlet fever, without first disinfecting the premises. How many similar cases could be found in Montreal?

#### PROFESSORIAL LONGEVITY.

The following interesting item is furnished by Professor L. A. Dugas to the *New Orleans Medical Journal*:

"In 1832 the Medical College of Georgia was organized by six professors, four of whom are still holding professorships, having delivered their forty-fifth course of lectures last winter. These are: Lewis D. Ford, M.D., LL.D., Professor of Practice; Joseph A. Eve, M.D., Professor of Obstetrics; Louis A. Dugas, M.D., LL.D., Professor of Surgery; Paul F. Eve, M.D., Professor of Surgery."

## MISSISQUOI SPRING WATER.

In the vicinity of Sheldon, Vermont, there is a spring owned by a gentleman in New York, which is known under the name of Missisquoi Spring, and whose fame as a mineral water was a few years ago known all over the United States and Canada. During the past few years, for reasons best known to its proprietor, the water was only to be had direct from the Spring, and not being advertised the demand was simply the result of the personal influence or recommendation of those who had used the water with benefit. It has recently been leased for a term of years by a wealthy firm in New York, who have already commenced to make things look lively about the spring. We were a short time ago enabled to pay it a visit, and found that among the inhabitants of Franklin County, Vermont, this spring has for years had a very great reputation. Of course, like most mineral waters, it is recommended for about every ill under the sun. We, however, have every reason for believing that in indigestion, eczema, rheumatism and morbus Brightii it is a very valuable remedy. We intend giving it a trial, and advise others to do the same.

## McKESSON &amp; ROBBINS' GELATINE-COATED PILLS.

We direct the attention of our readers to the institch of McKesson & Robbins, which will be found in this number of the *Record*. This firm has within the last few months introduced in Canada all their very elegant preparations. We have during the past two months made an extensive trial of them, and have found them thoroughly reliable. Their granules of quinine and of salicylic acid are especially elegant, and are to our knowledge being very extensively used in Montreal. All the leading druggists in the Dominion have their preparations for sale.

## SIMPLE MODE OF RELIEF FOR FOREIGN BODIES IN THE THROAT.

A British naval surgeon, Dr. Beveridge, states that for foreign bodies in the throat, such as pieces of meat, etc., a simple mode of relief is to blow forcibly into the ear. This excites powerful reflex action, during which the foreign body is expelled from the trachea. The plan is so easy of execution that, if there is anything in it, it ought to be generally known and applied.

## A NEW METHOD OF DISINFECTION.

The *Scientific American* states that M. Boschau has devised a method of disinfection based on the continuous and economical production of ozone by means of manganese dioxide, which is of timely interest. Ordinary light brown wrapping paper is thinly covered with size, and on the latter the pulverised dioxide is sifted, so that it forms an adherent layer. It is merely necessary to hang the sheets thus prepared in the apartment to be disinfected or aerated. M. Boschau states that he lined a trunk with paper thus prepared, and placed therein some old cheese and strong radishes, which he left in the receptacle for a fortnight. At the end of that period the materials were removed and the lid of the trunk quickly shut. Fifteen minutes afterward, on opening the trunk, not the slightest odor was perceptible, the ozone given off by the dioxide having completely disinfected the carbonic and butyric acids produced. The inventor proposes to manufacture wall paper, prepared in an analogous manner, for use in schools, hospitals, etc.

A correspondent of the *N. Y. Medical Record* writes as follows concerning the way in which they manage "these things" in the town of Waterbury, Conn.: "There are no losses, however, as *all* the bills are paid, and there are no free patients. The poor of the town are admirably provided for, and I wish some such plan could be adopted in New York City. When a patient wishes to avail himself of the dispensary, he is obliged to apply to one of the "selectmen" for a recommendation. If the selectman is not satisfied as to the applicant's poverty, the application is *refused*. When, however, the case is genuine, the selectman gives the patient a ticket of admission to the dispensary, and the *town* pays the doctor and buys the medicine; consequently Waterbury neither manufactures paupers nor starves its doctors. . . . The people seem not only grateful for what is done for them, but also anxious to settle their bills."

A Pulse of Ten Beats per Minute is reported in the *Paris Gaz. Medicale*. The case was pernicious algid fever. After several hours at the stated rate, it rose to twenty-five, and continued from twenty to twenty-eight for three days. The patient died.

## BIRTHS.

On the 31st October, at Compton, the wife of Reginald A. D. King, M.D., C.M., of a son.

## MORTALITY OF MONTREAL.

Statement of Deaths in the City during October, 1877.

Health Department, Nov. 9, 1877.

TOTAL NUMBER OF DEATHS, 275.

| SEX.                   |     | WARD.                                |     |
|------------------------|-----|--------------------------------------|-----|
| Males.....             | 136 | St. Ann's .....                      | 42  |
| Females.....           | 139 | St. Antoine .....                    | 45  |
|                        |     | St. Lawrence.....                    | 23  |
| Total .....            | 275 | St. Louis.....                       | 32  |
|                        |     | St. James .....                      | 47  |
|                        |     | St. Mary .....                       | 66  |
|                        |     | West .....                           | 0   |
|                        |     | Centre.....                          | 1   |
|                        |     | East .....                           | 5   |
|                        |     | Not Known.....                       | 2   |
|                        |     | Civic Hospital.....                  | 0   |
|                        |     | Hotel Dieu.....                      | 4   |
|                        |     | Montreal General Hos-<br>pital ..... | 6   |
|                        |     | Other Institutions.....              | 3   |
|                        |     | Total .....                          | 275 |
| CONDITION.             |     |                                      |     |
| Married .....          | 57  |                                      |     |
| Single .....           | 44  |                                      |     |
| Widowers .....         | 5   |                                      |     |
| Widows .....           | 12  |                                      |     |
| Children .....         | 157 |                                      |     |
| Total .....            | 275 |                                      |     |
| NATIVITY.              |     |                                      |     |
| French-Canadian.....   | 163 |                                      |     |
| British-Canadian ..... | 78  |                                      |     |
| Irish.....             | 17  |                                      |     |
| English .....          | 8   |                                      |     |
| Scotch.....            | 6   |                                      |     |
| Other Countries .....  | 1   |                                      |     |
| Not Known .....        | 2   |                                      |     |
|                        | 275 |                                      |     |

| Ages.                  | French<br>Canadians. | English<br>speaking<br>Catholics | Protestant. | Total. |
|------------------------|----------------------|----------------------------------|-------------|--------|
| Under one year .....   | 53                   | 6                                | 14          | 73     |
| From 1 to 5 years..... | 54                   | 12                               | 6           | 72     |
| “ 5 to 10 “ .....      | 5                    | 7                                | 5           | 17     |
| “ 10 to 15 “ .....     | 3                    | 2                                | 2           | 7      |
| “ 15 to 20 “ .....     | 4                    | 3                                | 3           | 10     |
| “ 20 to 30 “ .....     | 15                   | 6                                | 4           | 25     |
| “ 30 to 40 “ .....     | 8                    | 5                                | 5           | 18     |
| “ 40 to 50 “ .....     | 4                    | 3                                | 3           | 10     |
| “ 50 to 60 “ .....     | 9                    | 1                                | 6           | 16     |
| “ 60 to 70 “ .....     | 2                    | 2                                | 4           | 8      |
| “ 70 to 80 “ .....     | 4                    | 5                                | 6           | 15     |
| “ 80 to 90 “ .....     | 1                    | ...                              | 1           | 2      |
| “ 90 to 100 “ .....    | 1                    | 1                                | ...         | 2      |
| Not known .....        | ...                  | ...                              | ...         | ...    |
| Total.....             | 163                  | 53                               | 59          | 275    |

## CAUSES OF DEATH.

| CLASS I.—ZYMOTIC DISEASES.                    |     | CLASS III.—LOCAL.                               |     |
|---|-----|---|-----|
| Small-Pox .....                               | 12  | Cephalitis .....                                | 4   |
| Measles .....                                 | 1   | Apoplexy .....                                  | 2   |
| Scarlatina .....                              | 1   | Paralysis.....                                  | 4   |
| Diphtheria .....                              | 25  | Convulsions.....                                | 5   |
| Croup .....                                   | 16  | Other Diseases of Ner-<br>vous System.....      | 10  |
| Whooping Cough.....                           | ... | Heart Disease .....                             | 10  |
| Typhoid Fever.....                            | 13  | Other Diseases of Cir-<br>culatory Organs ..... | ... |
| Dysentery, Diarrhoea,<br>Chol. Infantum ..... | 15  | Bronchitis .....                                | 4   |
| Cere. Spin. Meningitis...                     | ... | Pneumonia .....                                 | 2   |
| Other Zymotic Diseases.                       | 11  | Other Lung Diseases.....                        | 6   |
| Total .....                                   | 94  | Diseases of Digestive<br>Organs .....           | 16  |
| CLASS II.—CONSTITUTIONAL.                     |     | Nephritis .....                                 | ... |
| Phthisis .....                                | 30  | Bright's Disease .....                          | ... |
| Cancer .....                                  | 3   | Other Diseases of Urinary<br>Organs .....       | ... |
| Other Constitutional<br>Diseases .....        | 15  | Diseases of Generative<br>Organs .....          | ... |
| Total .....                                   | 48  |   |     |

## Class III.—Continued.

| Diseases of Organs of    |     |
|--------------------------|-----|
| Locomotion .....         | ... |
| Other Local Diseases ... | 2   |
| Total .....              | 65  |

## CLASS V.—DEATHS BY VIOLENCE.

|                          |     |
|--------------------------|-----|
| Accidental .....         | 6   |
| Other Violent Deaths ... | ... |
| Not Given .....          | 7   |
| Total .....              | 13  |

## CLASS IV.—DEVELOPMENTAL.

| Infantile Debility .....                    | 32  |
|---|-----|
| Premature Birth .....                       | 7   |
| Dentition.....                              | 7   |
| Childbirth .....                            | 1   |
| Diseases Incidental to<br>Parturition ..... | ... |
| Senility .....                              | 4   |
| Chronic Debility.....                       | 4   |
| Total .....                                 | 55  |

## STILL-BORN.

|                                       |   |
|---------------------------------------|---|
| French Canadians .....                | 1 |
| English-speaking Catho-<br>lics ..... | 1 |
| Protestants.....                      | 2 |
| Total .....                           | 4 |
| Males .....                           | 3 |
| Females.....                          | 1 |
| Total .....                           | 4 |

The mortality for the month of October was 275 (exclusive of 4 still-births), being 57 deaths less than last month, and 75, 43 and 75 less than the corresponding months of 1876, 1875 and 1874 respectively. This figure represents an annual death-rate of 24.44 per 1,000 of the population of the city, the latter being estimated at 135,000, and is 5.11 per 1,000 less than that of last month, and 7.37 less than that of October, 1876. The number of still-births was 9 less than in September last. There were 112 deaths among the French Canadians under 10 years and 51 above. Among the English speaking Catholics there were 25 deaths under 10 years and 28 above, and among the Protestants there were 25 deaths under 10 years and 34 above.

There were 25 deaths by diphtheria, 2 more than last month, and 16 more than October, 1876. Nine were among the French Canadians, one of whom was under 1 year, 7 from 1 to 5 years, and one from 5 to 10 years. Ten were among the English-speaking Catholics, six of whom were under 5 years, and one from 5 to 10 years, two from 10 to 15, and one from 15 to 20. Six were among Protestants—two of whom were from 1 to 5 years, two from 5 to 10 years and two from 10 to 15 years. There were only three deaths from diphtheria in October, 1875, and but two in October, 1874. According to wards, the deaths were divided as follows:—St. Ann's ward, 8; St. Antoine, 4; St. Mary, 6; St. Louis, 2; St. James, 2; St. Lawrence, 1, and 2 in the Montreal General Hospital.

Twelve deaths occurred from small-pox—three less than last month. They were distributed throughout the wards as follows: St. Ann's, 2; St. Antoine, 4; St. James, 3; St. Mary, 2, and in the Hotel Dieu, 1. Eight were not vaccinated, 1 reported as vaccinated, and 3 vaccination doubtful. In October, 1876, there were 100 deaths from this disease, 58 in October, 1875, and 74 in the same month of 1874. There were 9 French Canadians, of whom two were under 1 year, six from 1 to 5 years, and one from 30 to 40 years, and 3 Protestants, 1 of whom was under 1 year, 1 from 15 to 20, and one from 20 to 30 years.

Four public vaccinators have been appointed to perform house-to-house vaccination. They have received instructions to make a weekly report to the Board of Health. Registers will be kept in which the name and age of those vaccinated will be entered, the names of parents who refuse to have their children vaccinated, and the name and residence of those who wish to be vaccinated by their family physician, to whom a card will be sent, giving the address of the parties desiring their services.

We announce with pleasure that the Board of Health can now furnish excellent vaccine, and will always have a sufficient quantity on hand for the wants of the city.

We again pray the members of the medical profession to report according to the forms that have been furnished them the cases of small-pox which they may have under their care. The object of this is to enable the Board to send a vaccinator to offer vaccination to those who may be directly exposed to the contagion as soon as the reports are received, and for the same reason we pray the clergy and citizens in general to report all the cases of small-pox that they may have a knowledge of to the Board of Health.

A. B. LaROQUE, M.D.,  
Medical Health Officer.

## Original Communications.

*Annual Address, before the Tenth Annual Meeting of the Canada Medical Association, September 12th, 1877, by the President, Wm. H. Hingston, M.D., L.R.C.S.E.*

GENTLEMEN,—In taking possession of this chair, the first duty (as well as the highest pleasure) is to express to you my profound gratitude for the honour you have conferred upon me in calling me to occupy it. Permit me to assure you that I am fully sensible of that honour, and that I realize, at the same time, the important duties your partiality has imposed; and, believe me, if I fail to discharge them to your, or to my own satisfaction, it will not be for want of good will on my part. My predecessors in this chair,—chosen for their fitness, at different times, from various parts of the Dominion,—have consigned to me the continuation of a labour begun ten years ago in the ancient city of Quebec, for the advancement of that benevolent profession with which we are so closely united or related. Although much has already been accomplished, we must admit that *all* the advantages hoped for from its founders have not yet been realized. Sufficient has been effected, however, to satisfy them and us, that a greater degree of energy on the part of the members of this Association, pervading, adjusting, sustaining, and agitating the whole, would have been attended with a greater measure of success. But in a profession such as is ours, ever varying, ever undergoing mutation of some kind; endeavouring to eliminate what can no longer be productive of good; and to appropriate what it wishes to retain; and with difficulties arising from geographical and social conditions, the Association has, indeed, effected some good since its formation.

It has been the custom, for some time past, at the opening addresses before societies of this nature in Europe, and chiefly in Great Britain, to take up some department of the healing art, or some master or explorer who has passed away. Thus Paget advocates, at length, before the Surgical Society, the claims of Hunter as a physiologist; Sieveking vindicates anew the claims of Harvey to be considered the discoverer of the circulation of the blood. But at the annual meetings of this Association, where time is not afforded for abstract questions of historic interest, we are confined to those of practical moment—those politico-medical questions, chiefly, which concern us most.

### OBJECTS.

It is sometimes insinuated that this Association has no objects sufficient for its existence; and that the good effected is altogether disproportionate to the labour, expense and time of coming together. But those are the insinuations of the ill-informed, who fail to perceive that, apart

altogether from the scientific importance of such gatherings, the social advantages of union and converse, social sympathy and fellowship with each other, outweigh, immeasurably, the inconveniences. The Medical Association of our American consins has had its history, but now it numbers so many members that it seriously contemplates making some change whereby that number may be reduced. Although almost too large and unwieldy for practical purposes, were it to pass away now, after only 30 years of existence, it must be admitted to have effected an amount of good that could not have been obtained in any other way. It has brought the medical profession of the United States into one body, and has encouraged State and smaller local societies, thereby improving the tone in these. So also with this Association, which can boast an existence of only one-third that period. Legislation has endeavoured to impose geographical boundaries; this Association defies all efforts at fixing limits or bounds, as of a territory. Legislation has imposed a term and limit to our functions, making the fit and capable practitioner of one province of our country disqualified for the duties of his calling in another; this Association rubs out and obliterates, for the time being at least, those unsightly enclosures which, although in a measure necessary, and created in self-defense, yet mar the beauty and unity of the whole.

### DIVISION OF LABOUR.

It is a matter of gratification that the work this session will, for the first time, require to be divided into sections. Hitherto every thing has been done in general assembly, but the number of papers this session is so many that two sections, at least, require to be created; and I shall ask you at the proper time to suspend the By-Laws so that sections may be formed, one for medicine, and another for surgery. The other branches of the healing art must needs find place in one or other section.

The general sessions will be held in the morning, each day, at which the reports of the various committees will be read. The papers on special subjects will be read and discussed at the afternoon sessions of the sections to which they may be referred.

As the work of the Association will be divided into sections, I am precluded the opportunity of dealing with what will be brought forward by the chairmen of sections at the proper time. I shall therefore touch upon questions of general interest, which cannot come under the prescribed heads; yet which concern the well-being of this Association; of the learned profession which it represents; and, more than all, of the community in which it is fostered.

### MEDICAL LEGISLATION.

The acts relating to the profession of medicine and surgery, in existence for many years

past, in this Province, have been changed. If amendment means improvement, correction, change for the better, then have I difficulty in unreservedly qualifying the hasty legislation in the ancient capital, last session, where three bills went in, to satisfy the fancies of three orders of mind, and one came out, satisfying fully, I believe, no order of mind.

The Province of Ontario has a central examining board, and the medical press and profession of that Province have pronounced in its favour. The Province of Quebec has, as yet, no central board, yet nothing short of it will satisfy the wishes of those who look only to the well-being of the profession, and of the community.

Medical education, as well as the preparation for it, belongs to each Province. It is useless, therefore, to speak of medical legislation for the whole Dominion; or of having a medical act to apply to, and to govern, the whole Dominion. But it should be an easy matter to introduce measures simultaneously, in the several Local Legislatures, each for its own Province, yet all alike, so that the practitioner in one part of the Dominion could be a practitioner in all; but central examining boards, one for each Province, and a uniform standard for the whole, must be elements in that system.

To compel persons, having a license to practise in one part of the Dominion, to obtain another to practise in another part of the same Dominion, seems to be an anomaly, but an anomaly which can be remedied only by a parity of medical legislation in the several Provinces.

How much more liberal is the present action in Great Britain, where the English College of Physicians has passed a by-law, by which even foreign practitioners may be legalized in England. Any candidate for the College license "who shall have obtained a degree in medicine or surgery at a British, Colonial, or Foreign University, recognized by the College, after a course of study, and an examination satisfactory to the College, shall be exempt from re-examination on such subjects as shall in each case be considered as necessary."

In this way, foreign and colonial practitioners may join the English College of Physicians, and so "find entrance to the Register"—the Medical Council of Great Britain still retaining the duty of accepting the conditions for admission to the Register of foreign graduates. It appears to me to be the duty, as well as the interest of this Association, to endeavour to effect such changes as would lead to a like generous action.

In our recent act, some most serious defects occur which, it is to be hoped, may soon be remedied. As the law now stands, it is competent for one or two persons in the large cities, not over-scrupulous as to means, so to gather up and manipulate proxies as to change the composition of the Board at an election. One active

man in Quebec or Montreal may control matters at any time for the whole Province, and practitioners residing in the town, or in country districts, may, without their knowledge or consent, be made instruments for the purpose. In Ontario, it is different. There, each medical school has *one* in the Council of the College of Physicians and Surgeons, not *two* as here; and those outside the teaching bodies must not only be residents of the several territorial divisions for which they are elected, but "one shall be so elected from each of the territorial divisions by the registered practitioners of Medicine *resident in such division*." And the divisions are those "as established previous to the Confederation of the British American Provinces for election of members of the Legislative Council of the late Province of Canada." With us each member of the College of Physicians and Surgeons, the moment he enters the profession has 40 votes for election purposes! He may use one in favour of the representative of his district or division, and still have 39 votes remaining for those outside of it; and may either vote, or transfer them to the most clamorous. It may be readily understood how such a defect in a law might lead to unseemly cabals, if not to confusion and injustice. It is to be hoped the anomaly that exists in our election procedure in this Province,—an anomaly for which I can find no parallel elsewhere,—will be removed.

#### QUALIFICATIONS FOR PASSENGER SERVICE.

Through the medical press of this country, attention has been drawn to the refusal to recognize Canadian qualifications for emigrant and passenger service on board British ships; and the matter has been taken up by the Transatlantic Medical Press and the Medical Council of Great Britain. The Board of Trade has rescinded the order, and Canadian Surgeons continue to exercise the privileges they have enjoyed, since emigrants first came to our shores. But the law still exists, and it is competent for the British authorities to return, at any time, to their former action. The qualifications of holders of Canadian diplomas have not yet been recognized, but their continued employment is acquiesced in. Many have asked that the subject be settled definitely. How can *we* ask for it till we obtain for the holders of Canadian diplomas recognition all over our own Dominion? Can we ask Great Britain to concede to us what we do not concede to each other? I say this, not to interfere with the courteous and most generous action on the part of the British authorities, but to stimulate you to renewed efforts to make such satisfactory arrangements as will enable holders of diplomas from one part of the Dominion to practice in all. The profession of medicine is a liberal one; not mean, narrow, or selfish. Being liberal, although



somewhat foreign to the subject, I cannot but allude to the uncourteousness of a member of the profession in Ontario towards a surgeon of distinction in Detroit who visited Ontario to perform an operation at the request of a highly respectable physician of the place. I am sure you will willingly make me the interpreter of your views in assuring Dr. Jenks, and, through him, the members of the profession in the adjoining Union, of our honest offered courtesy, and of our continued desire for reciprocation in matters which even governments cannot, and should not, attempt to control. Science requires, and humanity demands, in matters of this kind, the most unfeigned complaisance and civility.

#### EDUCATION.

I am naturally drawn from a consideration of the question: What should constitute the qualifications of a medical student before entering upon the *practice* of his profession, to what should be his qualifications on entering our medical schools? Should he have secured knowledge which promised nothing beyond knowledge itself; or, should he, as would have done a Cato, have acquired knowledge with reference only to what it could produce? Should he possess a liberal education; or that sort of knowledge which we now term useful? Should he possess refinement and enlargement of mind; or only sufficient knowledge of Latin to translate Gregory or the *Pharmacopœia*? Should he possess liberal knowledge, or, as it has been happily termed, a gentleman's knowledge—which, to possess it, is something, though it produce nothing;—or that utilitarian knowledge which is of use only when acted upon? Should it be the education which is philosophical, which rises to, and is enriched with, ideas; or servile and mechanical, and which expends itself upon what is external and visible? Should it be the education which gives a high tone of thought, a high standard of judgment; or that education which merely makes of the memory a passive receptacle of scraps and fragments of knowledge, to be served out confusedly and without method. The education I vindicate should give cultivation to the intellect; it should give a delicate taste, a candid, equitable, dispassionate mind, a noble and courteous bearing in the conduct of life. It should open the mind, correct it and refine it, and enable it to "know and to digest, master, rule, and use its knowledge, and give it power over its own faculties, application, flexibility, method, critical exactness, sagacity, resource, address." With the intellect, thus tutored and instructed, the student might enter upon the study of that most difficult profession of which we are members; engage in a calling the due discharge of which requires all the attributes of the mind, and the highest culture of the

intellect; and pursue with advantage a particular course of study which might issue in some definite, and, perhaps, remunerative work. It may be gathered from this that I share not with those arch levellers who advocate a low Utilitarianism; but rather with those who think the student should be formed "not by a parsimonious admeasurement of studies to some definite future object; but by taking a wide and liberal compass, and thinking a great deal on many subjects, with no better end in view, perhaps, than because the exercise is one which makes him a more rational and intelligent being." But this is not what has been obtained for us recently in a hurriedly prepared law relating to our profession in an important province of this Dominion, where our colleges and seminaries of learning have been degraded from their position. The graduate in arts, the student who has completed his eight or nine years curriculum at any of our colleges, should, by that fact alone, be qualified to enter upon the study of medicine. But no! our universities may grant degrees in arts, but the colleges and affiliate medical schools over-ride them!! and subject the candidate to a new ordeal, from which he should be exempt!!

Yet the possessor of a *liberal* education, compared with one *crammed* for an examination—the nature and extent of which he may have learned from those who had gone in before him—is, to use a familiar comparison, as one standing on the timber to be divided, seeing the line to be followed, and guiding the instrument intelligently, compared with the one beneath, who mechanically aids the work, but, blinded by the dust and particles he has detached above his head, is uninformed as to the progress or nature of the work being done. And so it is with labour of an intellectual kind. We must be above our knowledge, not under it. If above it, we may generalize, reduce to method, "have a grasp of principles and shape our acquisitions by them." If below our knowledge, we are confused and oppressed; and the greater the number of facts the more those facts confuse and oppress.\* This is markedly the case in medicine. An ill-informed physician is easily startled at every change in the condition of a patient; and rushes in to check, control and interfere, when, with a better trained mind, he would be led to observe, and to note, that, if need be, he might, with greater advantage, guide and direct. The uneducated man, unaccustomed

\* In an able editorial in the *Philadelphia Medical Times* for May, 1877, it is asserted that the standard of graduation in the United States, south of New England, has been steadily lowered, and although "new matter has been added to the curricula," and "the bait of clinical instruction has been alluringly spread, the effect has been evil, because the attempt has been simply to pour into vessels already overfull." Would it not have been clearer the truth to say the vessels had not been prepared of a capacity to contain what they received, but could not retain?

to group and to combine, gives prominence to what may be unimportant; and fails to recognize what is of value. It is with medicine as with politics. We have two classes of politicians in this country; the one, versed in the science and art of government, and in the ethics which concern human actions, and capable of an abstract view of the contentions of parties; the other, a mere transcript or copy of the last editorial in the journal of his party,—unequal to methodically arranging or digesting facts, or to comprehending the laws and principles which govern party and party issues. To which class of mind—apart altogether from party—would you most willingly entrust the guidance of the concerns of state? I anticipate your answer. To which, in like manner, should be entrusted, not party issues, nor the interests of a party, but what is of far greater moment,—the health and life of the people,—but to intellects formed and disciplined for the perception of those phenomena, the causes of which, even to the best trained minds, are far from obvious or indubitable?

I have ventured to say this much, even at the risk of fatiguing you, in favour of a liberal education, for the time is come when physicians can no longer hope to retain their position in society without that perfection of the intellect which is the result of education; which, as Newman says, "is the clear, calm, accurate vision and comprehension of all things, as far as the finite mind can embrace them, each in its place, and with its own characteristics upon it." In the days of Samuel Johnson the physician was admitted to be the most cultivated and learned in any society. In how many countries in the world could that be said with truth to-day? Could it in Canada? There are some countries where the physician is still among the best educated gentlemen, and his social status is regulated accordingly. Notably is this the case in Ireland. Dr. Stokes, with whom I conversed on this subject in 1867, and to whom I remarked the high tone; the gentlemanly bearing; the friendly relation one to another; the easy, well-bred familiarity which characterized the members of the profession in Dublin, said: "It is easily explained; nearly all our graduates in medicine are graduates in Arts. Of the last 98 all had degrees in Arts." There are some other countries where the same condition obtains.

If the cultivation of the intellect was necessary when men were content to observe, and to base practice on observation, how much more necessary is it now, when the most acute logical minds are sorely puzzled between what are claimed to be scientific truths, and what are bold reckless assumptions.

#### SCIENTIFIC ASSUMPTION.

This is unquestionably the age of bold, reck-

less, I had almost said impudent, assumption in matters of science. While it is generally conceded that our "ideas of the intrinsic elements that constitute beings in the physical as well as in the moral order are very limited and imperfect," we now boldly assume the mutual dependence of things upon each other when we could logically establish nothing more than co-existence or succession; as if co-existence or succession necessarily implies connection or relation.\* Look at the writings of a Spencer and a Huxley for illustrations of what I state. They, with Tyndall, have occupied a larger share of our thoughts than have many hundred more scientific writers who preceded and accompanied them. Yet what but bold assumption and word painting have we gleaned from the first of these; and a plausible but illogical mode of drawing conclusions.

#### SYNTHESIS IN MEDICINE.

While medical writers during the past and early part of the present centuries analysed, divided and separated diseases, and gave prominence to qualities and features by which one disease differs from, and is distinguished from another, (thereby clogging and oppressing the memory with varieties of dissimilitude,) there is a tendency now to synthesize, arrange and group in a more general way, diseases which may present some features of variance, but many of similarity and resemblance. Markedly is this the case in Cutaneous Medicine. Just one century ago, Shenck, of Vienna, completed his arrangement of cutaneous disorders. Willan wrote some twenty years later; and Hebra, also of Vienna, a half century still later. Compare the earlier with the later Vienna school, and we shall see that diseases are now classified on a sounder pathological and anatomical basis; that the skin is identified with "the rest of the organism;" and that the study of its diseases is clothed with a more scientific and philosophical character. And what are the advan-

\* We have had those assumptions on a large scale in Tyndall's assertion recently, that the blue of the sky, as seen from the highest elevations, and above possibility of contamination with earth, is caused by vast numbers of foreign bodies floating in the atmosphere, so small as to be undistinguishable by a microscope magnifying 1500 diameters. Dollinger produced a magnifying power ten times that asked for, and assumed to be sufficient, but the minute germs still declined to exhibit themselves even to this powerful observer.

We have had the same thing on a small scale in our midst. We had in Canada predictions about the weather *many months in advance*, which were received by the thinking public with a smile of incredulity; but by the curious with avidity,—*dulce est errorari*. Had these been confined to foretelling the occurrence of the seasons, promising as much cold in winter, much heat in summer, many showers in spring time, and frost and falling leaves in autumn, we should have applauded so wise a reticence. But more definite prognostications were required by the public, and were given; still the heat came and went—and the "*froid vivait son sac*," with a wantonness and nonchalance regardless of the feelings and interest of Mr. Vennor.

tages re-sulting therefrom? Cutaneous affections are regarded less as local affections, than as local manifestations of a general disturbance. Our own Erasmus Wilson simplifies cutaneous disorders still more by placing them in four groups—an *assimilative* group; a *nutritive* group; a *neurotic* group; and a *specific*, of which syphilis is the only example. "Nearly every new disease of the skin," says he, "might be comprised, therapeutically, under these four heads." What a stride is here made in a most interesting branch of medicine! and yet only in conformity with the experience of every thoughtful and observant practitioner. The tyro in medicine has, or thinks he has, a half dozen remedies for every disease; but as experience is gained, he learns, and with advantage to his patients, to make a fewer number of remedies to suit a much greater number of disorders. And thus it is in surgery; and thus it will be in Gynæcology, when the process of resolving the more hidden operations of nature shall have had its limits somewhat defined.

I have always thought, and the belief has strengthened with observation, that the work of grouping diseases for therapeutic purposes is yet to be done. Sir Henry Holland, many years ago, partially guided the current of medical thought in that direction. But the tendency to analysis, which the study of minute anatomy, and the use of the microscope, so greatly favoured, diverted that current, till the observations of a Neumann, of an Auspitz, or of an Erasmus Wilson, showed, in one department of medicine, at least, what might, with great advantage, be accomplished in all. Perhaps some member of this Association may yet achieve in other departments of the healing art what has been so well effected in this.

#### STATE MEDICINE.

Without taking from the important useful advances in medicine; the splendid triumphs of the surgeon; the wonderful precision of diagnosis of the modern gynæcologist;—there is a department as important as any of these; yet one so recent, that it is only within the past few years it has found a distinct place in any of the medical schools of the Dominion. I allude to State Medicine. Its object is, as tersely stated by J. Marion Sims, "to do everything necessary to protect the health of communities and states. It investigates the air we breathe, the water we drink, the food we eat, the clothes we wear, the fuel we burn, the houses we live in, the soil we cultivate, the habits and industries of life, the origin and nature of endemics and epidemics, the methods of their transmission, and the means of their prevention, and of their suppression wherever found \*\*\* it endeavours to discover the causes, and to prevent the originating of disease; to prevent its egress, to circumvent it, to extinguish it,

whether it be zymotic, contagious or specific. In short, it is the function of State Medicine to protect the public health, which is the life of the nation."

Gentlemen,—Is there, can there be, a more important work than "to protect the public health, which is the life of the nation?" And to whom does this work of right belong but to those who, already familiar with Physiological and Pathological Sciences can best teach and instruct their application "to the maintenance of the health and life of communities, by the means of agencies which are in common and constant use."

Speaking, as I do to-day, to, and in behalf of the Medical Profession, in this our beautiful and beloved Canada, I should say there is no work more important; no work more philanthropic; no work more benevolent than that of awakening in our population, and through it in Governments and Municipal bodies, a knowledge of, and an interest in, all matters relating to public health. A knowledge of the laws of health should not be confined to the profession. They were openly taught to the people by a Moses, and were not strained through time, but came down to our own day monuments of wisdom.

What is the duty and office of the physician? To deal with abnormal functions, and to change, if possible, or to remove unhealthy structures in the human body; to restore to that thinking faculty in man its pristine powers, that it may receive impressions, understand them, and be affected by, or be mindful of them; to restore health to the sick and wounded in spirit? Such, in a word, is the office of one who professes, or practises, the healing art; or who adopts manual operations for the cure of diseases that are external. But something more is required.

Is it not true that the profession as a body, deals chiefly, if not solely, with that entity when its being or existence is threatened; or when the harmony of its complex movements is disturbed? What a huge share of attention is directed to, and how closely we watch the progress in, that science which seems to deal chiefly with the symptoms of diseases, that we may recognize them truly; and with the effects of diseases, that we may limit or modify, if not hinder those effects. The medical press comes to us from every part of the civilized globe, and almost daily from around us, teeming with new methods of curing disease. New remedies, or new ways of employing old remedies, follow each other, phantasmagoria like, in such rapid succession, as to baffle the efforts of the most diligent experimentalist to examine and to select for future use, without seeming arbitrariness. And yet how often are the best efforts of the physician, even with his ever new and powerful armamentaria, powerless to check the spread of diseases, through the carelessness or

ignorance of those who surround the sick bed! If, for instance, diseases consist, as claimed by Tyndall, of definite particles, sometimes floating in gas, or in the air, or in the liquid we drink; and that like organic seeds in the soil the particles multiply themselves indefinitely in suitable media—the great probability being that their disease-producing qualities are living things—not gaseous or liquid,—but solid, the treatment of disease will resolve itself, sooner or later, into a kind of germicide within and without the body—within, in the fluids and secretions of the body—without, in the noxious elements that surround it.

The conviction is steadily gaining ground that a Board of Health should be established for the Dominion; Provincial boards for each Province; and local boards for every municipality. But where shall we commence? With the Legislature? No! Legislators are but the mouthpieces of the people; and if party politics consume their time, they but act up to the standard by which the measure and quality of their work are to be valued. Give them, however, another, and a higher standard by which to estimate and measure the line of duty, and make them to understand that the health and happiness of a people, as Earl Beaconsfield observes, are the foundation on which depend much of the happiness and power in the State, and we will find them exercising all the ingenuity of the age, and all the knowledge of our most advanced Scientists and Sanitarians in securing the lives, and in protecting the health of the people. But can we reproach them for doing nothing, while we do so little towards disseminating correct information, and inculcating proper habits among ourselves? Let us do our share outside of what is the truly professional—for none so qualified as we to do—and salutary laws will be framed, and the people will observe them. It is said that our favoured Sister City the Queen of the West, and the Capital of Ontario, has made "several very vigorous and very unavailing attempts to form a Sanitary Association, with a view of aiding the authorities in improving the health of the city." This city has been more fortunate, and has done more—but it required to do more.

#### LEGISLATION ON HEALTH MATTERS

has been, so far, unformed, unfinished, and immature. When I entered officially, a couple of years ago, upon the labour of endeavouring to improve the sanitary condition of the city in which we are now met, I found no law that could be put into force to carry out the most necessary sanitary measures; and, in my earlier enthusiasm, struggled, with but partial success, to obtain some amelioration in sanitary legislation. More matured experience, however, apprised me that legislation is useless where the people

are totally uninformed on the most elementary health matters. Where, for instance, the wisdom of endeavouring to enforce sewer ventilation, where the chief magistrate seriously proposed "trapping the sewers?" Where the advantage of endeavouring to accomplish what the whole scientific world approves of—general vaccination,—and, in times of epidemic, re-vaccination, when professors in medical schools will, in public squares and market places, harangue the uninformed against the practice? No. While our laws, as I have already said, are unformed, unfinished and immature, we, gentlemen, you, and I, and every one of us, have to do more than we have hitherto done to get those, whom sanitary laws affect, to have some sort of intelligent appreciation of the principles they involve. Every man can see, says Miss Lankerton, that if he persists in walking over a precipice he will, in all probability, be killed, and there is no need to enforce a law to prevent his doing so; but he does not see as clearly that if he and his family live and sleep in an atmosphere filled with sewer gas; or if they drink the unfiltered water of some dirty pool or river, destruction is as certain and inevitable, though by a slower process. Is it not clearly, then, the duty of those, whose eyes are open to the latter dangers, to make them evident, if possible, to those whose ignorance is as a "mist before their vision?" And, gentlemen, upon whom does that duty devolve, if not upon those who are qualified to instruct, where instruction is so much needed? I shall not go to other countries, or to other cities outside of our Dominion to ask a question. There are in Canada nearly 6000 physicians. Were that body of educated men to do its duty, each member of it in the space or circuit through which he walks, would the profound ignorance we meet with in sanitary matters be so general? I think not; and if accountability rests upon any one, upon us must fall a portion of that huge responsibility which doubtless rests somewhere for that large death rate which obtains in some of our larger cities. The physician who is content to prescribe only to those who are sick, but imperfectly discharges his duty to the state. There is a duty he owes to human society as such; to the state to which he belongs; to the sphere in which he moves (and the physician moves in every sphere); to the individuals towards whom he is variously related; and that duty is but ill-performed where ignorance the most crass, and prejudices the most benighted, are permitted to pervade a community.

#### INSANITY.

Papers will be read before you to-morrow on this most important subject, showing, I have no doubt, to what a labyrinth of difficulties the physician is sometimes introduced, when dealing, or attempting to deal, with those questions

of insanity, or supposed insanity, upon the elucidation of which, the hope and prospects of whole families sometimes depend. Whether, as held by certain Neurologists, hallucinations are accompanied, if not caused by, derangements of the optic thalamus or parts adjoining; or, according to others, that the seat of trouble is in the corpora quadrigemina; or, according to a third, that there is pigmentation of the retina and pigmentation of the spleen or of the cortical nerve cells, or in certain cases pigmentation of the whole brain; or whether, according to a fourth, better informed methinks, these appearances are mere coincidences, met with in sane and insane alike, thus severing the connexion endeavoured to be set up between insanity and pigmentation any where; or, whether anomalies in the vascular supply alone awaken old impressions, which are often erroneous, because misplaced as to time and circumstance; or whether, as beautifully put by Spitzka, complex registrations imply a higher consciousness, and can only have their seat in the higher centres, namely in the cortex cerebri, and that it is through the fasciculus of the corona radiata that registrations of thoughts or impressions, sane or insane, are "projected on the cortical convoluted screen," a screen, as Spitzka calls it, because it acts like one in receiving impressions, and differs from it only in that its impressions are never blotted out, except by destructive lesions or by death." While these questions concerning the site and causes of insanity are undergoing inquiry, and no where with more diligence than in some parts of America, let us hope with solution, the questions why should the brain alienate its functions; in what manner is lunacy brought about; whence and from what source is reason dethroned; and where is the seat of the usurper, although pregnant with scientific interest, have a more practical aspect, and one which concerns the public not less, and justice and humanity more.

The responsibility or irresponsibility of accused persons is a not uncommon question to be decided in our Courts of Justice, where the plea of unsoundness of mind is often put forward to influence and guide, or to hinder and traverse, the due course of law. There are many phases of insanity indistinguishable to the unprofessional observer; and as, on the one hand, the legal definition of insanity was settled, established, and freed, as was supposed, from ambiguity, by Legists who have long since passed away; on the other, every year adds a something to our etiology and pathology of that state, which under the term *insanity*, includes so many varieties of unsoundness of mind. The breach between Medicine and Law on this question has always existed, and must necessarily grow wider and wider, until another Erskine shall have arisen, who, availing himself

of the researches of recent neurologists, will adopt a definition more nearly correct than any of those which I take at random from standard works: "Un délire chronique, sans fièvre, avec excitation des forces vitales;" or as otherwise characterized: "Un délire général avec excitation, éraseibilité, penchant à la fureur." "Un délire général, ou du moins sans idée dominante, sans passions fortement prononcée et permanente, mais avec disposition à la fureur."

Such, gentlemen, or something much after this fashion, is the definition, in the gross, of a malady which jurists wish us to accept in courts of law, and upon it to decide whether a human being shall be hung or set free; deprived of the use and control of his property; or whether third parties shall receive or be deprived of what would otherwise be theirs.

It is very difficult indeed, says Lord Hale, to define the *invisible* line that divides perfect and partial insanity, but it must be duly weighed and considered both by the Judge and Jury, lest, on the one side, there be a kind of inhumanity towards the defects of human nature, or on the other side too great an indulgence given to great crimes. That line of distinction, referred to by Lord Hale, says Stephens on Crimes, has never yet been fully traced; yet medical men are often tempted to be bullied and browbeaten into drawing a defining line, (which to jurists, even, is yet "invisible,") of a discretion or discernment between good and evil.

I have already said that Law and Medicine are conflicting on this question; but to a Pinel, an Esquirol, a Riemschneider or a Barlow it belongs, and not to a Hale or an Erskine, to say who is, and who is not, insane. As sick men define their sensations most correctly, why not the insane, with Shakespeare, say what is insanity?

How pregnant sometimes his replies are! A happiness that often madness hits on, which reason and sanity could not so prosperously be delivered of.

They could do it as well as Jurists, whose training in Law does not qualify them more for questions of this nature.

The difficulties I have here merely glanced at were never more clearly or more forcibly set forth than by a distinguished member of this Society at its last annual meeting in Toronto. Dr. Workman, with a perfect causticity which he knows how to use, sketched some of those disputations between Law and Medicine, and the latter did not suffer in his hands. I should not allude to this question now, when so much remains to be said, were it not to point out the inconvenience, if not injustice, that is sometimes done by experts in courts of justice being outnumbered by medical practitioners who have given but little attention to the subject of insanity, and to whom the obscurer forms are quite unknown. If the most diligent and painstaking physician finds a lifetime too short to



familiarize himself with the office, functions and derangements of all the internal organs of the economy, and gladly sees medicine having its explorers in certain parts of certain structures; how necessary is it, in cases where reason is not totally dethroned, that the duty of advancing an opinion which is to sway a jury, and bear consequences the most important, should be confided to those who are accustomed to detect those early and less marked varieties, which might escape the notice of less experienced observers. I am forced into those reflections by a consciousness that justice has sometimes miscarried in Canada by the manner in which numbers have outweighed qualification. In French, and other continental courts, for many years past, questions of insanity have been referred to experts named by government, who form a neutral council, and neither one side nor the other can furnish *ex parte* evidence of a technical character in rebuttal. At the meeting in February last of the Medico-Legal Society, a step in the direction indicated was made by James Appleton Morgan, who moved, "That the Society appoint a committee to inquire into and ascertain concerning the system of medical and surgical experts appointed by law and attached to courts of justice, understood to be provided by the laws of France."

In this Dominion we do not look, nor do we hope at once, for that complete system which obtains in Europe; but we may, by a tacit acquiescence, favour a plan or arrangement which would be productive of much good. I should say much more on this subject, but as two papers will be read before you on matters germane to this question, I shall leave to Dr. Workman and Dr. Hornibrook the completion of the task they have assumed.

#### UNION WITH THE AMERICAN MEDICAL ASSOCIATION.

You may recollect that at the Niagara meeting of this Association, in 1875, it was decided that, "in consideration of the true interests of Medical Science, it is desirable that a medical conference should take place between the American and Canada Medical Associations at some central point to be determined upon; and that the American Association be advised as to the desirability of thus becoming more intimately acquainted, and affording an opportunity for the discussion of medical and surgical questions on a common basis."

At the Louisville meeting of the American Medical Association, later in the same year, the subject was taken up, and it was resolved "that a committee of thirteen be appointed, whose duty it shall be to confer with a like committee of the Canada Medical Association at such time and place as may be agreed upon by the joint committee of the Associations." That joint committee met in Philadelphia in September,

1876, when it was unanimously resolved "that a union of the two Associations into one is desirable, and that the president of each be requested to bring the subject before his own Association, and present his own views upon the matter, in order that the question may be fully discussed, and action taken thereon by the members at their next annual meeting." The "next annual meeting" of the American Medical Association was held in Chicago, in June of this year, and the distinguished President, Dr. Bowditch, of Boston, fulfilled in an admirable manner, the duty imposed upon him, by summarizing, in his address, the arguments for and against the proposed union.

Among the latter, speaking for the objectors, were: the difficulty already experienced of making so unwieldy a body as the American Medical Association, a working body, would be increased; the two languages used throughout this country; the difficulty of arranging the expenses of the united body; the widely distant places of meeting, &c., seemed against the proposed union.

The arguments in favour of the union were thus stated by Dr. Bowditch, and I give them in his own words as the best evidence of the kind feelings of the Association, and of the courtliness and urbanity of its President towards Canada and its young Association:

"First.—We should associate ourselves with a body of physicians all of whom have been educated under English influences, and many of whom have pursued their studies in England, and have received diplomas from the schools of that country. We all know the high standard of qualifications required by the British schools.

"Second.—Why may we not look upon such a connection as quite similar to that which has frequently taken place, and which will occur again hereafter, when a new state in this Union is formed?

"In that case, if a State Medical Society be organized, it has to send delegates to this Association. The only difference in the two cases, would be that Canada embraces a very much larger constituency than any of our new States would have.

"Third.—I am inclined to look with favour upon the proposed union from the standpoint of civilization itself. There can be no doubt, as already stated, that this American Association has been a great means for promoting good-will between the different sections of the United States. The proposed union with Canada will tend much towards the reuniting of two of the freest nations on the globe, and certainly civilization can get only good from such co operation. All means that we can bring to unite mankind I hail with delight.

"Fourth.—I will allude to what will give me, and I doubt not many more, great pleasure. I

wish the united professions to meet in the old cities of Montreal and Quebec, and pass up and down the noble St. Lawrence, magnificent as it is in the length, depth and breadth of its waters, and still more fascinating from its early associations with European civilization. I would like that we should all stand on the scarred battlements of Quebec, and I think perhaps we, of this country, might learn a divine lesson of magnanimity after war, if we could together look at the obelisk erected by the graceful action of the British government to the joint memories of Wolfe and Montcalm, two brave soldiers, antagonists in battle, but in death, joint heirs in the memories of mankind."

Dr. Bowditch, in conclusion, suggested that the whole subject be referred to the judicial council of the Association then in session. It was so referred; and the council soon after reported *adversely* to the proposed amalgamation.

That decision, gentlemen, relieves me from the duty imposed upon me of presenting my own views upon the matter at this, the first "next annual meeting" of the Canada Medical Association. Yet I may be permitted to observe, in view of the vast but sparsely populated territory, and of the very diversified elements that compose our less widely extended but more furnished neighbour, union for scientific purposes was a lone possible; for all matters pertaining to medical ethics or education could not possibly have been discussed and settled by two peoples so near each other in many things, so far asunder in others. But I rejoice that the discussion of the subject has furnished occasion for the most friendly intercourse, where geographical boundaries were overleaped, and where forms of government did not obtrude but to give higher zest and relish to our intercourse. I beg, now, on your behalf, to reciprocate the sentiments of the President of the American Association, that each should send, annually, delegates to the other Association. Each will surpass the other in being neighbourly; and the delegates admitted to the other Association will be the representatives, from across the border, of mutual good will.

That has already been done this year, and I welcome most heartily our distinguished friends from the United States, and greet them in your name.

And now a word of explanation which might have come earlier. The Canada Medical Association did not ask for amalgamation; or to absorb, or be absorbed by, the American Medical Association; but merely for "a conference at some central point" so as to become "more intimately acquainted," and to discuss "Medical and Surgical questions on a common basis."

If our representatives at Philadelphia asked for more, they were not so commissioned; and

in resolving that "a union of the two Associations into one, is desirable," they expressed their own views,—advanced and liberal, no doubt,—but spoke not for the Canada Medical Association, which, at Niagara in 1875, asked merely for a "medical conference," for the "discussion of medical and surgical questions on a common basis" without either Association losing, or wishing to lose, its identity.

But union of the two Associations is of the near future, and in a way little dreamed of, perhaps, by the superficial observer. History tells us that absorption usually goes on from the north. The statistics recently furnished show a birth-rate for some parts of Canada which has never been equalled. In the city of Montreal, last year, the birth-rate was 49 per 1000, and the French Canadian element alone gave 64 per 1000, the largest birth-rate that has ever been reached. Union, amalgamation, absorption, are of the near and certain future, therefore, if our large birth-rate, and the alarmingly small birth-rate in some of the States of the adjoining Union, continue as at present.

#### FÆTICIDE.

Here, gentlemen, my somewhat lengthy address should end, but yielding to the solicitations of some of my medical friends, and impelled at the same time by a sense of duty, I venture to touch upon a matter of extreme delicacy, but of vital moment. It is asserted by an American writer, (Dr. Allen,) that in *certain* classes of society in some parts of the adjoining Union, for a long time past the marriage relation would seem to be regarded, not as a Divine institution ordained by God for the preservation of the species, but as a matter of convenience and self-interest. To use his own words: "the standard of living is too high; the artificial wants are too many; confinement to household duties is irksome; children are a burden; the responsibilities of maternity must be avoided or limited. Hence in married life a series of 'nameless acts' take place, which need not be described." In those few grave, weighty, momentous sentences, gentlemen, are contained a picture of some of the chief causes of that alarming decline of birth-rate, and with it, and as a consequence of it, a gradual and pernicious change in the female physical organization. This, in thoughtful minds, has created alarm lest the *induced* organization become permanent in type. I know not how to enter upon the subject without running some risk of offending reserved and modest sensibilities. The crime I have faintly alluded to is but the logical outcome of those theories of genesis and of population which have been so enticingly placed before us by some very eminent scientists in latter years. There was a time when the birth-rate, in the United States, was as large as in Europe, or in

any part of the world. In round figures the States doubled their number, from births alone, every twenty-five years. How is it now? Vital statistics are as yet too incomplete to base any accurate calculation for all the States of the Union, but those of Massachusetts and Rhode Island are most trustworthy, and afford information that is appalling.

The registration reports for Rhode Island, which I have just received from Dr. Snow, than whom no one is more competent show an immense falling off in the birth-rate in that state, and leave but little room for conjecture as to the cause. Those of Massachusetts are equally significant; and were they not furnished as State Documents with all the weight of authority, I should not dare to allude to them.\*

I fully admit the statement of Dr. Edward Jarvis that: "Massachusetts is one of the most favoured states in the world for the intelligence, at least of its native population, and for their thrift and wisdom in management." In the fifteen years preceding 1870 of the children born in the state only 13.91 per cent. died in their first year—the smallest infantile mortality, excepting Norway, in the whole world. And when it is added that this mortality "includes the record of the foreigners, whose infant mortality was in a larger ratio, as well as that of the native families whose infant mortality was at a lower rate than this average," it may be seen how devoted, how intelligent is the care of the New England mother of her infant.

Once born, the New England child has a better chance of living than has the child of any other country or state; but Storer and other American

writers have pointed out the ante-natal dangers to which the fœtus is exposed. And we are left no room to conjecture one at least of the causes.

Dr. Gould, of Boston, speaking of the births registered in Massachusetts 1859 to 1863, says: We have to record a continued deficiency in the number of births to be expected from the known population. 1865 was a year of war, and the diminished birth rate may be satisfactorily explained—the birth rate was only 4,097 in excess of death rate. But even then it was noticed by Dr. Geo. Derby that the births had diminished in all but three counties, while the deaths had diminished in every county except two. The population at that time being 1,267,059, there was one living birth to every 41.89 persons, and even then it was observed "that the births are most numerous in the counties containing crowded towns and a large foreign population." Dr. Derby, as if in anticipation, adds: It should not be inferred that the ratio of excess of births among the foreigners . . . is likely to lead finally to an extinction of the American element. But the most striking statement is that of Oliver Warner, Secretary of the Commonwealth: The native population of Massachusetts in 1860 was 970,752, the foreign population in the same year was 280,114. In that year the natives produced 16,672, the foreign 16,138. Dr. Derby in commenting says: The superior fecundity of the Celtic race . . . over the Anglo-American race is, we think, abundantly proved.

In 1865 the native population was 1,000,761, the foreign 266,270. They produced in the following year, the former 16,555 children, the latter 17,530—thus showing a productiveness of the latter over the former four times as great.

In 1867 the birth rate was 27.6 per thousand. Compared with the preceding year, the American births had diminished by 318, the foreign had increased by 922.

In 1868 the birth rate was 28.6 per thousand, an increase over former years, and it was then observed that the strictly American births had diminished 2.21 per cent.; the strictly foreign had increased .84 of one per cent.

In 1869 the birth rate was 25.5 per thousand. It had decreased by 52, while the marriages had increased by 970. It has now arrived that the excess of birth rate over death rate is but two-thirds of one per cent!

It is again observed that the American births had diminished during the preceding year, while the foreign had increased. The foreign births now exceed the native by 2,129, notwithstanding the relative smallness of the population.

In 1870, Dr. George Derby, Secretary of the State Board of Health, and Professor of Hygiene in Harvard University, reports the birth rate for Massachusetts as 26.2 per thousand, and adds: "The proportion of foreign births has remained quite constant since 1864; the purely American births have steadily diminished their ratio, and the births from mixed parentage have as steadily advanced." He continues: "Surely, and not very slowly, a mixed stock of Irish, Germans and Canadians is taking the place of the purely English stock which has possessed Massachusetts for more than two centuries. Here are facts for the statesman, the educator, and the moralist." In 1871, the same high authority states: "The superior fecundity of the foreign element among us is a fact fully recognized, and one which is confirmed in a most suggestive way from year to year by the registration returns. This year there was an increase of American births by 234; of foreign by 781.

In 1872, the births had increased by 3,444, but the deaths by 7,076, and the excess of birth rate over death rate was but .563 of one per cent. Again is noticed a progressive diminution in the purely native births, and a corresponding increase in those from a mixed parentage. The excess of birth is now entirely with the foreign element. In one year the native births have increased by 1,125, the foreign by 1,992.

The report for 1873-74 I have not at hand, but that for 1875, just published, (1877), is more than confirmatory, and with it I close.

Dr. Derby has passed away, and Dr. Draper prepares under direction of the Secretary of the Commonwealth that portion of the thirty-fourth Annual Registration Report from which I glean that the birth rate is 26.63 for every thousand of the population. Still a falling off—28.3 having been the average for the preceding three years, and 27.4 the average annual rate during the twenty-five years,

\* The population of Rhode Island last year was 258,239, of these, classed by *nativity*, the *foreign* born were 71,630, and the native 186,609. I continue Dr. Snow's figures: the report of births for 1875 gives 6,508, divided as follows:—American, 2,727; foreign, 2,906; mixed 875. The birth-rate for 20 years, says Dr. Allan, has steadily decreased among the Americans, but increased with the foreign, so that in 1875 the foreign had 58 per cent. of the births in the state. Dr. Snow adds:—The native American population of Rhode Island, by parentage, has increased 12.89 per cent in ten years, while the foreign population, by parentage, has increased 80.11 per cent. in the same time. In 10 years at the same rate the native population of Rhode Island would be 152,087 and the foreign 222,466.

In two years (1874-5) 8,221 married women in Providence, born in the United States, and of an age to bear children, had 2,532 children; while 5,919 married women of the same ages, born in foreign countries, had 2,912 children in the same time; that is, says Dr. Nathan Allan, the foreign married women, 2,302 less in number than the American married women, had 380 children more. If the American married women had had, in the years 1874-75, the same percentage of children as the foreign born women, there would have been 4,044 children of American parentage, instead of 2,532, a gain of 1,512 children. If the comparison is made between the American and Irish alone, by parentage, the former class would have had 4,249 instead of 2,532, the actual number, which would show a gain of 67 per cent in two years. I have selected Rhode Island because the system of Registration is singularly correct; and I have taken the *ipissima verba* of the reports. The statistics of many other states are equally appalling. Those of Massachusetts especially so.

1851 to 1875, a period which comprised the Southern war, when the birth rate was low from other causes than those I have alluded to. "The fact remains," says Dr. Draper, "that our birth rate in Massachusetts is lower than we would like."

The birth rate among the foreign born in 1875 was 55.51 per 1,000, while the birth rate among the native born was 16.46 per 1,000 in the same year.

It may be consoling to say that the question of survival is of great moment. And here the advantage, as I have said, is entirely with the native American element.

In looking at these figures, is there not reason to fear the fulfilment of Dr. Knox's prediction, that were the North American continent not fed by a constant influx of European blood, it would again revert to the Red man as its sole possessor. But no! other causes than climatal are at work, for the sun shines on the willingly prolific, and the wilfully barren, alike; both are heated by the same summers and chilled by the same winters.

What I may have to say on this subject must not be considered as applied to any class of persons, but to individuals, here and there, in a class. A very small percentage of officious meddlesome females would disturb the birth rate of a large community. (At the moment of writing I can recall to mind the recent case of a well-dressed person, with somewhat of cultivation and refinement, who came from the adjoining Union, with shattered health and with heart bowed down, who admitted to me, unreservedly, having procured abortion, in her own person, fourteen times! She had so well learned the art from the fiend who had aided her at her first gestation that she required no assistance in the disposal of the subsequent thirteen.)

When persons have learned to regard man, in embryo, as a mere aggregation or union of fortuitous atoms, a plastic germ, a kind of colloid or protoplasm, which the chemical and mechanical laws of attraction and repulsion, selection and rejection, change and wave-like motion, may ultimately develop into a thinking being, but little heed will be given to the integrity of that immature creature suspended in the female womb. Broadcast over this land are sold pamphlets, the titles of which are alone attractive, instructing the female in measures for preventing conception, or for favouring abortion at an early period; and all in accordance with the views of certain classes of materialists and pseudo-philosophers. That the lesson is too well learned is evident from the experience of every physician who has written deprecatingly on the subject.

If the organization that now belongs to us had been progressively developed, the crime of feticide would not be of that heinous character which it would be, were that organization transmitted to us, without mutation of any kind, from our first parents. If man derives his existence by a process of evolution from a simple cell way up through the tribes of zoophytes, lizards and monkeys, *cui malo*, then, now and

again, to hook an embryotic mass from any part of that long living chain? The Bathybius or beetle; the cod fish or chicken; the mollusk or monkey is but a link, and man is no more; and it is of small moment which portion of that link receives the attention of the prudentialist.\*

Such are the views adduced by those who consider that there is a period, anterior to which man is a mere protoplasm, having no rights superior to those possessed by it. And this revolting idea, which, when entertained, disturbs every system of moral and religious belief, is clutched at by those who might hesitate to interfere with that highest, noblest work in embryo, were man created perfect by his Creator, but who, in the theory of evolution, have an excuse for what is claimed to be, not a wrong or an evil *per se*, but, at most, an unintentional detriment to the State.

If what Herbert Spencer says be true, that of all antagonisms of belief, the oldest, the widest, the most profound and the most important is that between religion and science, he is at fault here. There is none, there can be no antagonism between physiological and pathological science and true religion in the subject I am now considering. What is the moral and ethical aspect of the question? What is its social bearing? What are its bearings towards religion,—not that religion of a particular system of faith, but that of acknowledgment to God and our obedience to Him and to His laws? What is its legal aspect?

#### MORALS.

In ancient Greece, where public opinion seemed to accord a license to one sex without showing any corresponding indulgence to the other, where, as Zenophon says, woman was like the queen bee, dwelling continually at home and superintending the work of the household, marriage was regarded in a civic light, as a means of producing citizens. At that time the beauty of form of the offspring was the strongest desire of the wife. The intense æsthetic enthusiasm of the period led the Greek wife to pray, before all other prayers, as Lecky says, for the number and beauty of her children. While in the ancient Roman family the authority of its head was absolute, marriage, and all that resulted therefrom, were protected by law and severe public opinion. For upwards of five hundred years, according to Valerius Maximus, the marriage tie was regarded as indissoluble, and according to Cornelius Nepos, the mother of the family was placed at the head of the table, and was even more honoured in her *maternal* character than in that of wife. The Roman

\* I do not use the term by which the prowler for nascent human prey, who would limit and control man's entity, is familiarly known, as it is not yet found in our dictionaries, and I shall coin no word for the purpose.

matron was a name of honour, and Modestus interprets truly the feelings of the Roman people in defining the union of the sexes in marriage as a life-long fellowship of all divine and human rights; rights of the husband to generate and transmit; rights of the wife to conceive and bring forth; and rights of the fruit to be sheltered from ante-natal danger or injury.

At a later period when, after the Punic wars, Eastern luxury and Eastern voluptuousness over-spread the Roman territory, there was a rebound into vice again; but while slaves took the place of wives, and undisguised, unblushing obscenity so flaunted at midday as to call for a law to prevent nameless crimes, even then the pregnant woman, whether wife or slave, was treated tenderly, and with the greatest consideration, for having consulted the perpetual endurance of the race, while contributing to a brief enjoyment.

When, later, female virtue suffered from the great wave of corruption that overflowed the land of the Cæsars, leaving but here and there examples of simplicity, gracefulness and chaste heroism, yet never, even in its worst times, was a nameless crime, now so common, even known to the people of that period.

At no time either during that profligate epoch, could be found anything so unblushingly wicked as the literature which finds its way so near to, and into, our Canadian homes, and which causes some alarm lest curiosity might prompt, and virtue might suffer from, a perusal.

I have been speaking of Pagan times: what shall I say of the early Christian, when a life of asceticism was considered the most perfect, and when marriage was tolerated "because it produced offspring," and was ordained by God for that purpose.

I had the curiosity to consult the *Senchus Mor*, comprising the ancient Laws of Ireland, to see what rules, if any, regulated the relation of the sexes, among the people of that prolific land. But while every conceivable form of crime,—many of them now unknown,—received attention; while all the relations of men to one another and to animals, are copiously treated; while for every conceivable forbidden act are provided compensation, exemption, fines, forfeiture, honour price, restitution; for man in every rank; for woman in every state; from the King on his throne to the cat mousing in the garret, no mention is made, no punishment is provided for that crime spoken of in Genesis xxxviii, 9th and 10th. It seems to have been unknown, and I may add, is still unknown among that people. But lest the designs of Providence should be thwarted through prudential reasons, such as now obtain in certain states of society, neglecting marital duty is dealt with as a crime, and classed for the purpose of punishment with mutilating the person, stripping the slave, &c.

The woman with child was treated then as

now with the greatest tenderness. No neighbouring woman, with bodkin; no village blacksmith was there to rid her of her burden; no demon defiling the name of Doctor to step in, and, with shielded stiletto to unhinge the work of nature. The word of a woman in childbirth was taken before all other evidence; and if unintentional violence had been used; or disgraceful violence as it was termed ("in turthach is tar") which brought on premature labour, and not in natural course, injuring her person, or killing her child, her oath or statement when in labour, or the oath of a witness, before whom the woman in labour made the statement, was taken, and punishment followed, for the *Senchus Mor*, as dispensed by the Brehons, would not allow that a woman in labour could speak anything but the truth.

The social consequences of this evil are beyond measurement or conjecture. Adopting the views of Malthus when the converse obtains, when the law or principle by which population increases is violated, the evil must not be viewed as progressing arithmetically, but geometrically. In Canada the French population has doubled itself since its foundation every twenty years. What factors were the three thousand who landed here 210 years ago, in the 1,350,000 Canadians of French origin who now people both sides of the St. Lawrence and its many tributaries, the Ottawa, St. Maurice, and Richelieu, and extend into the North West, and Eastern Townships, besides, sending half a million to the adjoining Union! What numerous existences were compressed and included in those few lives of our early settlers.\*

The question in its religious aspect is easily understood. The most welcome promise made by God was that mentioned in Deut. viii. 14: "There shall not be male or female barren among you." Property, titles, honours could not bring so much delight to a people who thought barrenness, in wedlock, a reproach. All Christian nations are instructed to believe, that matrimony has for its principal end the propaga-

\*It was always the aim and effort of French Canada to encourage early marriages, and to develop native population. In the middle of the 17th century, young girls were selected in France for their piety and virtue, and sent to Canada, where they were soon sought in marriage. A dower of twenty livres was given to each one, and families of ten children, resulting from the union, were presented with 1,200 francs, and 1,600 francs to families of twelve. In 1660 there were 2,500 persons in the Colony; yet in eleven years, 700 children were born. Even now, taking the whole Province of Quebec, we find an average of a fraction over seven persons under each roof, or more than 6.23 persons in every family. Among the births the preponderance of those of the male sex is remarkable, a percentage of 51.13 to 48.87 female. As the deaths occur among male and female children alike, the preponderance of the former is steadily increasing, and indicates in a marked manner a difference with what obtains in Europe where the male population is as 49.61 males to 50.39 females. The birth-rate in the city of Montreal, among the French Canadian population is now 64 per 1000, the largest birth rate in any country in the world.



tion of mankind; although it has other accessory ends, such as the comfort afforded by the society of man and woman, &c. In the exercise of the rights of marriage nothing can be done against its final end. Hence the condemnation of the crime (Genesis xxxviii. 9) in a mere natural point of view—God alone being the giver of life, the married parties are but His instruments in the bestowing of life. They have no more control over the beginning and continuation of life in the mother's womb than they have over the life of the child born. The *fœtus* in utero has the same right to the enjoyment of life, as the child after it is born. At the very moment of conception, there is, at least, material or physical life, and more probably *animated* life also, as many are of opinion that the *anima*, or soul, is united to the body at the very moment of conception. Even were that union to take place later, the *fœtus* enjoys already physical life of its own, and is intended by the law of nature to enjoy animated life: nay it has a right to it, of which right none, save the Master of life Himself, can deprive it. Hence, whether the union of the soul and body be consummated in the act of conception, or later, there is a violent and unlawful snatching of human life, if the *fœtus* be destroyed.

An objection may be raised: when the *fœtus* constitutes danger of death for the mother—a plea put forth by the strong and the weak alike—can it not be considered as an invader *vitæ*, an offensive enemy, and cannot the mother's life be protected against that enemy, at the risk of destroying it? That danger arises from nature itself; and the mother, by assuming all the risks of her state, has submitted to it, and must abide by it. Besides, if the *fœtus* be an invader, it is an innocent one, and can no more be punished than an insane man who would kill a fellow man: no more than an innocent man could be put to death to rescue another from certain death. If it is alleged that the mother has a right to preserve her life, the same may be said of the *fœtus*; and if the mother had a right to deprive the *fœtus* of life, the *fœtus* would have the same right to deprive the mother of hers. From this we derive the principle:

1. It is never lawful to procure abortion *directly*, even though the *fœtus* be supposed to be inanimate, under whatever plea of averting death. It were homicide; at least anticipated homicide.

The great principle underlying this question is, in a word: "Thou shalt not kill." God alone is the Master of life, and He alone can take it away. This is the universal Christian code. Christian, did I say? Nothing can be added to the Hebrew teaching in this regard.

The sin of preventing conception denounced in the Hebrew Scriptures, e. g., as in the case of Onan, as "evil in the sight of the Lord," and the kindred crime of *fœticide* is held up

by the teachers of Judaism, the Talmudical and all Rabbinical writers as a sin which God can never pardon,—omnia peccata condona, Deus excepta—הוציא שכבת זרע לבטלה "*hotsi shûchbat zerang leba tela*," i. e., who brings forth semen improperly or causelessly. "He who is guilty of the unnatural and detestable vice inherits Gehinnam," teaches the Talmud, in various places,—“he is worse than a murderer.” In the Gemara or completion of the Talmud we are told that the disciples of a celebrated Rabbi asked him: how is it possible that one committing this sin should be worse, morally, than one who takes the life of a developed man who may be wise and good and useful to the State? The reply was: “in the latter instance he takes the life of a stranger, but in the former he unnaturally murders his own children.” Again, in “Sepher Hammaaloth” it is taught, that he who does not duly perform the marital act is “a spiller of blood.” To destroy the semen, or to procure abortion, is declared to be running counter to the will and intentions of the Supreme Creator who has already formed elsewhere the “zevug” or marriage match for the *fœtus*. The Talmudic code is crowded with the most minute instructions for the development of modesty and chastity. Thus, in the Mishua Treatise, Aboth, we read: “he who has had an *accidental* emission of semen is not to perform his ordinary devotions, much less the minister, or one who is to pray for the many.” The constitutions concerning marriage, which fill a volume, give the most minute directions with regard to the “roheh kerî,” (*qui vidit semen*) in other words, precautions to prevent the use of the same for any other purpose except that of raising virtuous children in Israel. The act is to be performed with absence of all levity, and rather with prayerful aspiration, that the issue may be for a “kiddush hashem,” i. e., to promote the sanctification of God's name, in darkness and with all modesty. Early marriages are most strictly enjoined as a consequence of all this. “He who does not marry and raise children causes the divine presence (*Shechinah*) to depart from Israel,” see *Yoreh Deah*, p. 1. Again: “he who has no wife is not to be called a man; but when he marries and has children, his sins will be forgiven him.” A man who knowingly marries a barren woman is denounced as a fornicator—*Yoreh Deah*.

The result of such teaching is evident among the Jewish people. They are singularly free from the detestable crime to which I am alluding, and from that other, anterior to it, for which I can find no name, but which is so repugnant to the designs of the Creator.

#### WHAT ARE ITS LEGAL ASPECTS.

According to law, causing or procuring abortion is a felony—a “*crimen animo felleo per-*

petratum"—with a bitter or gallish inclination—a crime which at common law occasioned the forfeiture of lands and goods, and is classed with suicide and manslaughter. It is not, indeed, murder in the eyes of the law, for in order to make the killing, murder, says Stephens, it is requisite that the person killed be a reasonable creature, in being, and under the King's peace at the time of the killing. To kill a child in its mother's womb, therefore, falls under a different description of crime. But it approaches more nearly to murder, and murder most cowardly, than any other crime; for it cannot be pleaded that it is done without malice aforethought. The malice prepenſe, *militia pre-cogitata*, does not require to be towards the unknown, unseen foetus, and is, therefore, not so much malevolence to the deceased infant in particular, as any evil design in general—the dictates of a wicked, depraved, and malignant heart, as Foster expressed it,—une disposition à faire une male chose—which may be either expressed or implied in law. It may be taken for a general rule that an act of this nature is malicious, and *should* amount to murder, unless where *justified* by the command or permission of the law, or *excused* on account of accident or of self-preservation, as in cases where the accoucheur risks the life of the child to save that of the mother. But without these circumstances of justification, excuse, or alleviation, the earnest and oft times tearful plea "I don't want to be bothered with any more children" would not be sufficient in any court of justice, still less in the forum of one's conscience, where a faculty may still exist of judging of conduct with reference to some standard of right and wrong. There was an old Roman law by which the slayer of her own child was punished in a much severer manner than any other kind of homicide. After being scourged, the delinquent was sewed up in a leathern sack, with a live dog, a cock, a viper and an ape, and so cast into the sea. Solon the wise, in his laws, made none against this crime, apprehending it impossible, as Cicero says, that any one should be guilty of so unnatural a barbarity.

I have been at some trouble to search out the law on this question, as it has been more than once urged that the death of the mother alone jeopardises the life or liberty of the fiend who accommodately assists, or the woman who wantonly permits, or procures, or in any way wilfully occasions, a violent interference with the law of nature; and I find that as society advanced (?) the law was modified. By 43 Geo. III., c. 58, and 9 Geo. IV., c. 31, s. 13, it was provided that to administer a destructive thing to procure the miscarriage of a woman *quick* with child should be a *capital* felony; and if she should not be proved to have been *quick* with child, a felony punishable with transportation. But the law is now governed by 7 Will. IV.

and 1 Vict., c. 85, s. 6, which provides that whosoever, with intent to procure the miscarriage of any woman, shall unlawfully administer to her, or cause to be taken by her, any poison or other noxious thing, or shall unlawfully use any instrument or other means whatsoever, with the like intent, shall be guilty of felony and liable to transportation for life, or not less than fifteen years, or to be imprisoned for any term not more than three years."

What says *science*? Apart altogether from those numerous ailments and diseases which follow in the train of such violations of the laws of God and of nature, and which a volume would be insufficient to delineate and pourtray, I shall merely observe that there is a peculiar condition of the os uteri brought about which is often the cause of subsequent miscarriages. The neck of the uterus, as Depaul observes, is a sort of sphincter muscle; and in many women this is in a lax condition, predisposing readily to abortion. With it there is indeed "a special irritability of the uterus, exciting it to relieve itself of its contents." How frequently do we not notice this condition in meddlesome females who, in the early months of married life, abhorring maternity, prevent it! yet who, at a later period, would sacrifice every thing short of life itself to regain the health they had wantonly sacrificed, and some at least of the lives they had so mercilessly brought to nought.

The indurated or hyperplastic condition induced by this wicked practice, indisposes the uterus to expand and yield before the growth of the foetus at a subsequent gestation. The uterus, on account of that induced congestion or hyperplasia, is, moreover, prone to assume an abnormal position, and to add thereby another element of discomfort to the mother, and of danger to the safe progress of future gestation. When, as it often happens, future gestations are denied, the sufferings are not less severe. Who, amongst us, cannot recall the haggard, anxious expression, the hollow cheek, the sunken eye, the pallid, sickly countenance, the uncertain gait, the pain in forehead, side, back and limbs, and that indescribable sensation of fullness, yet of emptiness, that feeling of dragging, or of gnawing in the hypogastrium, which attends the wakeful moments, and disturbs and hinders rest, and which is as

The pang where more than madness lies,  
The worm that will not sleep, and never dies.  
Thought of the gloomy day and ghastly night  
That dreads the darkness, and yet loathes the light;  
That winds around, and tears the quivering heart!  
Ah, wherefore not consume it, and depart!

But to come back again from Byronianism to plain prose, can I exaggerate the misery and distress which follow in the wake of the unhappy misguided deflowerer of her own womanhood, who so completely divorces herself from all freedom from sickness or suffering for the future.

I can but faintly allude to that other sinful evil; that partial and incomplete act, equally, if not more mischievous, which the law does not contemplate; which the moral law alone can touch; and which God alone can see; yet which, to mention, reddens the cheek with confusion. To reduce to nothing, when immature, and to be no longer, is, without doubt, say some, a great gain; but to have never been, save in the fecundating principle which found no matrix to foster and maintain its life, is better! Oh Shame, where is thy blush! If there be such a power as Conscience, where is its office? Yet women, otherwise delicately-minded, chaste and virtuous; and husbands, otherwise considerate, and worthy of respect and honour, combine to thwart the designs of marriage; to engender a whole train of evils in one at least or in both; to violate the laws of God and of nature; and to conspire against the State.

This vital problem is obtaining solution too near our own doors for us to remain indifferent spectators. So far the pernicious teaching has done but little injury here; but, gentlemen, who is there amongst us to-day who will not be prepared to admit it has done some? Who amongst us has not been appealed to by married women in fashionable society to thwart the designs of Providence in their regard? And who amongst us does not know the earnestness of that appeal, where delicate health, narrow means, the claims of society, the displeasure of a husband, are urged most tearfully, in support of an undesired maternity, by those whom we would be disposed to befriend? What young man amongst us who has not been obliged to reject a proffered bribe where his impecuniosity seemed to give hope to the would-be feticide? What practitioner, who has not found his advice "not to kill" spurned by one who looked to him for help in ridding her of the fruit she was bearing? Some years ago I was present at an interesting meeting of Physicians at Malone, N. Y., and the aged President dwelt, among other things, on this topic. He told us of a married lady, one of his best patients, healthy and affluent, who wished to be relieved, at an early period of gestation, of the legitimate fruit she was bearing. He expostulated, coaxed, and at length, threatened. She left his office, indignant at his want of complacence; and although he had attended her and her family for years previously, she never afterward went near him. But to continue his own story: "I had my own satisfaction, for of a fine afternoon, a young lady of eighteen summers full of life, and health, and beauty, might be seen passing my window, little dreaming, and I would not have her know, how much she was indebted to the humble old man in his office near by for the continuance of the life she now so much enjoyed."

Gentlemen of the Canada Medical Association: Why do I enter into this matter at all while the beautiful and interesting fields of scientific discovery are so inviting? Believe me, I have no relish for it, and more than once have I turned with loathing from the task. But, let me ask, is there no necessity? Do you not perceive in spots here and there in our Canada, and chiefly along the border, a knowledge of the physiology of conception, and, alas! a knowledge of the means of its prevention, which would be better unlearned? It could not be that crimes which a Storer denounced in Massachusetts; a DeForest or a Thomas in New York; or an Allen in Rhode Island, could have continued to be confined to the adjoining Union. Like the Colorado bug it would cross the border, and produce its work of mischief here. And it has been suggested to me that a few plain words proceeding from this chair—having a weight, a character and a quality which might be attached to the utterances of the occupant, honoured, for the moment, as the mouthpiece of this important Association—would not be misplaced or ill-timed.

*Case of Cerebral Tubercle*, by Wm. Fuller, M.D.; Professor of Anatomy, University of Bishop's College.

GENTLEMEN,—The case which I am about to relate has been of sufficient interest to call together in consultation several of the best medical minds of this city, and has brought forth various conjectures as to the nature of the disease, which was very obscure. The subject was under my care for a short time before his death, and the following is the history of the case—as near as I could obtain it—and the symptoms which presented themselves to notice:

J. Y., aged 35 years, Scotch, wiry constitution, dark complexion, open intelligent countenance, active habits and quick movements, formerly a passenger conductor G. T. R., but lately carrying on business as a retailer of boots and shoes, was struck on the back of the head about five years since against a bridge while passing through on the cars. He was knocked insensible, but for how long I was unable to learn. However, since that time up to eighteen months ago he appeared to be in good health and was very efficient in his business. He was very lively in company though temperate. It was noticed since that time that he had acquired a peculiarity in his manner, was eccentric, so much so as to have acquired the nickname of "Crazy Jim." He had an extravagant

notion of dress, which was without taste, and he would frequently, when engaged in conversation on other subjects, ask the person talking with him if this or that color was suitable for him. He had also extravagant notions of making money which agitated him up to the last day he could utter an intelligent sentence. If another proprietor of a boot store put out a new sign he was in a great state of agitation, until he should get something better so as to attract more notice. I mention these, among many other things which I heard of him, to show the excitable state of his mind and his ruling passion.

Eighteen months ago he complained of a severe frontal neuralgia fixed in one spot just above the outer angle of the frontal bone on the right side. For this he was treated for several months, with only occasional relief. A change now came over his character; he neglected his dress, began to lose his memory, and his usual energy in business abated; his intelligence and spirits failed. His credit was affected because it was suspected that he drank, which, however, was not the case to any extent, though he took an occasional glass. He was frequently seen to sit holding his head in his hands as if in great pain. Three months ago he began to be very drowsy, would fall asleep behind the counter, lie down upon the leather, floor or anywhere, would sleep at meals and while in conversation. Shortly after this he began to talk foolishly, after the manner of a mild delirium, imagining that he had just returned from travel to the old country, &c., relating what he had seen. He slept during the day and spent the night in wandering through the house. His appetite was not good at this time, and bowels confined four or five days at a time. It was now thought better to remove him to an asylum, where he stayed one week, and, as he was pronounced by the medical superintendent, Dr. Howard, to be a hopeless case, and that he would soon die, he was brought home, where he remained about one week when I saw him for the first time. What I have related above I obtained from various sources among his friends, and as this history was related before his former medical attendant without comment I suppose it to be correct as far as could be obtained. There was no history of syphilis or tubercle in his family, nor is there evidence in the lungs; once when there was severe pain the

right eye was turned inward. He has never vomited. His sexual desire has diminished for some time, and of late is entirely absent? There is at present a slight divergence of the eyes; he complains of dimness of the left eye, so that the outline of a figure only is observed which he sees indistinctly, left eye slightly more open than the right; upon elevating the brow right side more corrugated; mouth drawn to the right side slightly, and left side of the face shows less expression than the right. There appears to be partial loss of power, but not total paralysis of any of the muscles of the left side of the face, and, as evidence that it is a loss of power rather than spasm of the muscles of the right side, as suggested, it was observed that, when asleep, the right side wore a pleasant natural expression, while the left eye was slightly open and the left cheek fell loosely and puffed with the breathing. He has had formication occasionally in the feet and legs. His general movements are stiff and his gait slow and somewhat tottering. There is no localized weakness other than that mentioned. His intellect is clear at times for short periods, but soon relapses into a mild delirium of the imagination; calls individuals with whom he is well acquainted by wrong names, and associates them with circumstances which have never transpired; is very desirous to recover; expresses anxiety about the cost of the means, and occasionally about the state of his business.

This date is about October 15th. Morning, pulse 80; temperature normal—evening, pulse 90° temperature 100°; complained of chilliness, and it was further observed that there was an œdematous swelling of the right temporal region limited by the boundaries of the temporal fossa. From this date to the 22nd Oct. there was little variation of his symptoms; complained very much of chilliness, wandered about at night and slept in the daytime. Had continuous pain in the frontal region, with more violent exacerbations occasionally. Asked frequently for beer, which made him sleep, and it was remarked that always when he had severe pain he could drink any amount of stimulants without the least effect, while a very small quantity affected him when there was no pain. Temperature registered twice in the evening 100° during this period.

October 22nd. Considering the former injury,

at the site of which there was a scar but no depression in the skull, the period during which there was an excited condition of the mental faculties followed by a localized pain in the frontal region of severe character, to which he always pointed as the seat of his distress, the local œdema near this point, the chills and variable temperature, the stiffness and formication in his limbs, the intellectual debility and excited imagination, together with loss of expression in the opposite side of the face, led me to believe that this was a case of abscess, probably between the dura and skull in the frontal region, if not in the substance of the anterior lobe. I inclined to the former view, because of the œdema, and because his intellectual faculties could be roused into action at times, implying that the function of this part was interfered with rather than destroyed. With these views all present assented, at least so far as to justify an exploratory opening into the cranial cavity. Accordingly the skull was opened by a trephine, about two inches above the external orbital angle of the frontal bone; no pus was found, and the dura had a healthy appearance. A director was passed downwards and also forwards to the extent of an inch in each direction between the membrane and bone without success, finally the dura mater was opened, the brain appeared healthy, and there escaped a small quantity of serous fluid, which also had a healthy appearance. The wound was not closed but left open to permit free drainage which, in my experience, is very important where there is an opening into the sack of the arachnoid as well as other serous cavities. It was thought best at this juncture to reconsider the factors upon which a diagnosis was made and to wait for events.

It must be confessed that the case appeared at this time somewhat foggy, and three theories or conjectures were advanced to elucidate the problem: 1st Spasmodic neuralgia, to which I could not agree, for the reason before stated, that the symptoms were rather paralysis of the left side of the face. 2nd. Spiculæ of the internal lobe of the skull at the site of old injury, causing irritation of the meninges. However, against this theory was the fact that there had been no convulsions, so common in affections of the middle and posterior lobes of the brain. 3rd. Abscess in the substance of the anterior lobe, the evidence of which has been related.

To return to the case, nothing remarkable occurred after the operation. He took his tea at the table the same evening, and at ten p.m. I found him sitting by the stove, discussing the situation, and apparently none the worse. There had been considerable escape of serum from the wound, so as to saturate the bandage, and his conversation was less wandering than before the operation, a fact which I assured myself of by staying some time with him, and which was also noticed by his friends.

Oct. 23rd, 24th, 25th.—Pulse 80; temperature normal; abundance of serum from the wound, which has a healthy appearance. Mental condition better; talks for the most part rationally; slept almost all night; desires beer, and has been allowed half a glass at bed-time, which produces sleep.

26th.—Wound looks a little inflamed on the margins; temperature 100<sup>3</sup>, removed two stitches which partially closed the incision. To take a "black draught."

27th.—Better; temperature normal; wound healthy.

28th.—Restless night; mind disturbed when awake with former imaginations; less discharge of serum from the wound, some pus and the bottom looks white; is sleepy, and does not wish to be disturbed. From this time to November 8th he had relapsed into the condition before the operation, and the wound had healed until a small scab occupied the place and no discharge.

Nov. 8th.—Was up the whole night, crying with pain "Oh my head!" He was attacked with violent nervous agitation like a fit of ague, though he was not cold. Pulse or temperature could not be taken. In the evening retained food a long time in the mouth before swallowing.

Nov. 9th.—Great pain, all night but remained in bed, slept a little in the morning; very quiet and dosing to-day; less muscular agitation; speaks thick; has difficulty of swallowing but ate a little. Delirious toward evening, and grasping as if at objects in the air. Pupils normal and equal; flushing of the face as in meningitis in children.

Nov. 10th.—Violent jerking agitation of the whole body; semi-comatose condition; stertorous breathing; hiccough; mumbling of words as if trying to speak; frequently puts his hands to his forehead. Pulse and temperature could



not be taken on account of the agitation of the muscles. Took a few spoonfuls of beef tea.

Nov. 11th.—Condition unchanged; pulse was found to be irregular; wet the bed; had difficulty in passing urine; bladder empty, bowels confined; flushing of the face. It was to-day discussed as to the propriety of aspirating the anterior lobe of the brain, but, as it was thought that the symptoms were too generally resembling more a case of meningitis at the base of the brain, 2 gtts of croton oil was given at 7 p.m., which operated freely at 10 p.m.; the contents of the bowel passed unconsciously.

Nov. 12th.—Rested better last night, quieter this morning; face less flushed; pupils normal but divergent squint; frequently turns his eyes toward the left side and groans, putting his hand to his forehead. Toward evening he relapsed into muttering, grasping, for objects and agitation. I then thrust an aspirated needle into the brain in three directions. 1st, directly into the anterior lobe, ( $1\frac{1}{2}$  inches); 2nd, toward seat of pain in the forehead (2 inches); 3rd, backward and downwards towards the corpus striatum, ( $2\frac{1}{2}$  inches). This procedure produced no effect, nor was pus discovered. However the next day, November 13th, I was surprised to find him quite conscious, no jactitation or tremor, very quiet, and with a pulse of 64; temperature normal. I told him to use a pickle bottle when he wished to urinate, which he understood well, took the bottle, adjusted himself and filled it, remarking that it was a handy article for the purpose. Gave potass iod. gr. 20 every 2 hours.

14th.—Rested tolerably well; not much pain; conjunctivitis of the right eye; condition same.

Nov. 15th and 16.—Gradually sinking; pulse rapid; looks pale; takes no nourishment; semicomatose; puffing of left cheek; eye half open and corners of the eyes filled with a yellow secretion; right eye still inflamed, pupils equal, more contracted.

17th.—Very restless night, violently agitated, tries to speak, and to tear his clothing. Died at 1.30 p.m.

#### AUTOPSY 20 HOURS AFTER DEATH.

*Scalp* bloodless; *calvarium* smooth, and presents nothing abnormal on either surface. Site of trephining in condition as stated above.

*Dura Mater*.—Corresponding to the circular orifice in the skull-cap is an elevated spot on this membrane, roughened, but not inflamed. Pacchionian granulations numerous.

*Surface of Brain*.—No effusion or lymph. Veins of the pia mater moderately full; the smaller ones on the surface of the right frontal lobe not so much so as those on the left, hence this part appears somewhat paler. At the point on the pia mater corresponding to the site of trephining there is a diffuse redness of the membrane, due to a thin extravasation. The surface of the right frontal lobe looks flatter than the corresponding one, especially along a line parallel to, and half an inch from the longitudinal fissure. At a point corresponding to about the middle of the second frontal convolution pus oozes from a slight laceration, caused probably in the removal of the organ.

A section of the right hemisphere, made about an inch above the corpus callosum, and carried through to the surface, shows the white matter looking healthy, and the *puncta vasculosa* well marked. At the periphery of this section there is a localized spot, about half an inch above where the pus was seen oozing out, greyish yellow in color, as if infiltrated with purulent matter. Immediately below this is an abscess, half an inch by three-quarters of an inch in extent, involving both grey and white matter of two convolutions, and corresponding closely with a portion of *dura mater* beneath the site of trephining. The pia mater over the spot, and in the sulcus, is congested, and a little thickened. The abscess is made up of two spots of suppuration, separated by a wall of white substance, the contents being reddish grey pus. Two suppurating lines separated from each other by a narrow portion, run from these spots through the white substance, in a direction downwards and inwards, each somewhat larger than a quill. Unfortunately, owing to the fact that these sinuses were not discovered until after the slices had been removed (the section having gone between them) their mode of termination was not made out, unless an ecchymosed and somewhat softened spot at the anterior and outer angle of the right corpus striatum represented the end of one of them. The walls of the abscesses and their prolongations were soft and suppurative; the white matter about congested and ecchymotic.

Nothing worthy of note was found in the grey or white substance of the other lobes of either hemisphere.

On exposing the lateral ventricles these cavities look of normal size; walls in places granular; choroid plexuses dark. The right corpus striatum appears flatter than the left, and has a greyish-yellow tint, while to the touch it is yielding and semi-fluctuating. On section it presents a soft, greyish-red appearance, and the elements separate under a gentle stream of water. This condition of softening involves nearly the whole corpus, extending posteriorly into the thalamus, and outwards and downwards for  $\frac{1}{2}$  inch into the substance of the frontal lobe. Portions from these parts show under the microscope: (1), broken down and degenerating nerve filaments; (2), compound granular corpuscles, very abundant; (3) hæmatoidin grains and crystals. The greater part of the right thalamus opticus, the left and the left corpus striatum, appear normal.

*Base of Brain.*—No lymph or effusion; arteries healthy. On the right half of the optic commissure the pia mater is matted and thickened, and the same condition extends for a short distance along the right optic tract. On the side of the crus just in front of where the tract winds round it, is a greyish yellow nodule, the size of a pea, attached to the pia mater. The roots of the various nerves, at their superficial origins, appear normal.

On following out the right sylvian fissure a bunch of tubercles is found on the meninges situated in the receding angle formed by the convolutions of the Island of Reil and the deeper ones of the frontal lobe. The group is made up of six or seven greyish yellow masses ranging in size from small peas to small marbles, closely matted together and partly imbedded in the brain substance about them. A branch of the middle cerebral artery runs upon the surface of the mass, the calibre of which, on slitting it up, is found considerably diminished, but not obstructed. The brain substance about the tubercles is softened, more especially towards the deeper part of the frontal lobe, where it is continuous with the softened area about the right corpus striatum. A section through the group shows that the bodies composing it are closely united together by condensed meningeal tissue of a dark red colour. On separating the left sylvian fissure another somewhat smaller bunch of tubercles is met with, occupying a very similar position to that described in the right, only a little further back in the fissure, and not so much imbedded in the brain substance; six or seven tubercles, the size of peas, compose the mass, and present the usual character of these growths; the central part of each is yellowish in colour, firm and dry,

and made up of finely granular matter and the remains of corpuscles. At the periphery the tubercle cells are abundant, and mingled with them are irregular masses of protoplasm, giant cells. The small arteries in the neighborhood of the tubercles present an increase in the cells of the adventitia, but not to the extent seen in cases of acute tubercular meningitis. *No miliary tubercles were found.*

Lungs and other organs healthy. No tubercle found elsewhere.

*Some of the Sequelæ of Pleurisy.*—By ALEXANDER B. BLACKADER, B.A., M.D., M.R.C.S. Eng.; late Resident Assistant to the Brompton Hospital for Diseases of the Chest, London, and late House Surgeon Great Ormond Street Children's Hospital London. Read before the Medico-Chirurgical Society of Montreal, December 14th 1877.

The inflammatory affections of the chest, even after all their immediate symptoms may have passed away, call forth the anxious thought of the physician, in reference to the sequelæ that may so often follow them.

The dregs of inflammatory changes linger about this region, in a way they appear to do nowhere else, taxing all the powers of the constitution in the effort to throw them off, and occasionally after a period of latency, extending perhaps over years, originate, directly, or indirectly, fresh mischief, which slowly undermines the vitality.

The sequelæ of the pneumonias, especially the chronic and catarrhal forms, we are all more or less familiar with and dread. Bronchitis in a more open manner leaves its remains behind with sufficient frequency to keep us on our guard; but the effects of pleurisy appear to me to some extent to have been overlooked, and underestimated, perhaps, because more latent and less frequent.

Indeed many authors appear to think that it is a very infrequent occurrence for any serious lesion to follow, even after a somewhat protracted attack. I cannot say this agrees with my own observations.

Out of 124 cases of phthisis received into Brompton Hospital whose histories I made out, 14 had a distinct history of primary attack of pleurisy, so far as could be ascertained only simple and unilateral. While among the outdoor patients, although I have no distinct records as to numbers, it was a matter of frequent remark how often the contracted and nearly motionless side told the tale of previous pleurisy.

Dr. C. J. B. Williams in his work on "Pulmonary Consumption," though classing them under

the general head of "Cases Arising from Inflammation," gives several instances where apparently the phthisis had its direct origin in either acute or chronic pleurisy. In children, though pleurisy has generally a favourable termination, and they appear sometimes in a wonderful way to outgrow completely the subsequent contraction, yet in them the disease, more frequently than in the adult, terminates in empyœma, with its accompanying train of fresh dangers. To-night, therefore, I propose very briefly, to lay before your notice some of the lesions which I have occasionally observed to follow pleurisy, and will hope that, in the discussion which may follow, I may elicit from other members their opinion as to how far my observations agree with their own.

These lesions may be arranged, I think, in three groups, as follows:

1st. Those which result simply from the inability of the lung to expand, owing to the fibrous adhesions.

2nd. Those which are due to the formation of new growth through the lung.

3rd. Those due to purulent absorption, after the pleurisy has become an empyœma.

I am aware that many consider my first-class a myth, and deny entirely that any evil results follow from this inexpansive condition. Austin Flint, referring to adhesions, says, "however extensive, they occasion no appreciable disturbance of respiration. They are in fact innocuous, and perhaps confer exemption from recurrence of pleuritis on the same side, nor do they give rise to any distinctive physical signs."

Certainly a prior reasoning would not lead us to imagine it to be an advantage thus to have a lung done permanently up in splints, and I cannot say that my observations would lead me to agree with his statement, for I think, if we notice carefully, we shall find two different conditions brought about, according as the adhesions on the one hand are partial or merely local bands; or, on the other hand, the lung is universally adherent.

These local adhesions or bands interfere comparatively slightly with the movement of the chest wall, but prevent altogether a certain portion of the lung tissue from expanding, especially the alveoli towards the upper portions of the lung, and at the back near the spine. As a consequence, we must in time get a compensatory emphyœma of those portions which can expand. It is condition of things which I have several times thought I saw in the out-patient room. The following is an example from an in-patient.

George B—, bricklayer, æt. 46, admitted into

Brompton Hospital March 6th, 1877. No family predisposition; habits steady; eight years ago suffered from pleurisy on left side; was three weeks in bed; six weeks ill altogether; thought he quite recovered from the illness; following winter suffered from cough, which, though better during the summer, grew more troublesome each succeeding winter. For the last two years has never been quite rid of it.

On admission complained of cough, not very severe, accompanied by frothy expectoration; pains through chest, chiefly left side, and some shortness of breath. He was a short built man, fairly nourished

Measurements of chest:

Above nipple: R.  $16\frac{1}{4}$ ; L.  $15\frac{3}{4}$ ,  $\frac{1}{4}$  in. movement  $\frac{1}{2}$  in. on deep inspiration, chiefly on right side.

Below nipple: R.  $15\frac{1}{2}$ ; L.  $15\frac{3}{4}$ ,  $\frac{1}{3}$  in. movement,  $\frac{3}{4}$  on deep inspiration, chiefly on right side.

Physical Signs.—*Left*: percussion resisting anteriorly, dull to 2nd rib; respiratory murmur very deficient, and slight bronchial click occasionally above; expiration much prolonged below. *Right*: somewhat hyper-resonant; respiration harsh; 2nd sound accentuated over pulmonary.

He remained six weeks in the hospital, and was sent out with his physical signs much about the same, but his general condition much improved. In this case I would trace the beginning of his trouble to the attack of pleurisy, eight years previously, which probably left some strong adhesions towards the middle or upper part of the left lung. This prevented the air-cells above in great measure from expanding, and gave rise to an emphyœmatous condition of the lung below, and this again in turn, owing to deficient aeration would cause obstruction to the circulation, as evidenced by accentuation of 2nd sound over pulmonary artery, and a congested state of the lining membrane of the bronchi and alveoli, as shown by the frequent bronchitic symptoms.

Some may object to a case like this, that the pleuritic adhesions are the sequence, not the antecedent, of the emphyœma. As Dr. Douglas Powell has pointed out, when a portion of lung becomes damaged in texture by disease, it ceases to follow accurately the expansive movements of the chest wall. A certain gliding or rubbing motion takes place between the two normally corresponding pleural layers at this point, friction, local pleuritis, and adhesion result. No doubt this is the order of things occasionally, bringing about a precisely similar state in the end; but, in the case I have quoted, the definite attack of

pleurisy at the first certainly points to it as being the originator of the mischief, and I have no doubt that, in a good proportion of the cases, a similar history may be made out.

In the other condition, where the lung is universally adherent, and the chest wall prevented from expanding, we get in the end a somewhat similar state of affairs; of course it is quite possible that the sound expansile lung shall do the additional work thus thrown upon it without indicating an appreciable disturbance of the respiration, as Flint says.

Probably in most cases it does do so, as long as there is no great strain put on the respiratory function, but in many cases I think we will find some indication of interference as shewn by the state of chronic bronchial catarrh which these persons are so liable to suffer from. A condition of things due, as in the case of George B., I have just mentioned, to the want of aeration of blood in the affected lung, producing passive congestion in it, and a more active hyperæmia in the lung on the opposite side.

In the second class, in addition to the effect produced by rendering the lung inexpandible, we have a definite hyper-activity of the fibrous elements in the interlobular connective tissue—beginning apparently in the lung tissue adjacent to the thickened pleura, and gradually extending through the whole lung. This new growth afterwards undergoes contraction, producing the tough indurated condition of the lung, with dilatation of the bronchi known as fibrosis.

That pleurisy is an occasional starting point of this condition there can be no doubt, and the cases I shall presently lay before you are, I think, instances of it; but the exact way in which it originates these changes is still uncertain.

Probably, in many cases, we may have a low form of pneumonia supervening; but, even without distinct pneumonic symptoms, may we not find, in the state of chronic passive congestion in which we suppose the affected lung to be, a sufficient originating cause of this new interstitial growth, which afterwards goes on to contraction.

While in the increased blood supply, caused by the two pleural surfaces uniting, the supply which was formerly on one side only being now derived from two sides, viz., both the parenchyma of the lung and the parietes, may we not look for an explanation of the hyper-activity of its fibrous elements.

Without any further attempts at explanation,

which I would leave to others abler than myself, permit me to give you briefly, as fair examples of the progress of this degenerative process, the following clinical histories:—

Annie H., æt. 22, single; admitted into Brompton Hospital Oct. 30, 1865, under the charge of Dr. Cotton. Her father and mother were, at that time, both alive and healthy, and there was no history of phthisis in any of her immediate relations. She was of a nervous sanguine temperament, of a slight build, and had enjoyed fairly good health up to the spring of the preceding year, when she was attacked by pleurisy in the right side. This she told me confined her to her bed for several weeks, but she thought she had quite recovered from its effects, till some months afterwards, when her cough became troublesome; was not aware of any fresh cold.

*On admission* (sixteen months after the attack of pleurisy) the symptoms were as follows: troublesome cough, with scanty expectoration; pain in the right side; night sweats and considerable loss of flesh.

*Physical signs.*—Right side—anteriorly—percussion dull, especially towards base; respiration very harsh; posteriorly—dull all over supra spinous fossa, bronchial breathing with subcrepitant rhoncus; posterior base; respiration very weak.

Left side, respiration simply harsh.

She remained six months in the hospital, gaining, during her stay, over 12 lbs. in weight. On leaving, she again entered service, and was able to do her work fairly well.

Four years afterwards she was re-admitted. The cough was still very severe, but there had been no loss of flesh in the interval; contraction and flattening had taken place on the right side, where the respiratory sounds were now noted as being almost cavernous. The left lung was slightly enlarged, and the respiration over it harsh and blowing. On leaving, her weight is noted as 102 lbs., a gain of an additional 4 lbs.

In June, 1874, that is, after the lapse of another four years, she was again re-admitted for a short time. Her health had remained fairly good during the greater part of this interval, and, with but few interruptions, she had been able to perform all the duties of her place. For the last twelve months, however, she had been failing, and a slight hæmoptysis had occurred, which somewhat frightened her. She remained in hospital for a short time, during which she again had improved. On leaving, the physical signs were about the same as before.

In January of the present year she was again readmitted under the charge of Dr. Powell. She was now much worse; renal mischief having supervened in September of last year. Her cough was now particularly severe, causing frequent retching; the expectoration very viscid, purulent, and somewhat offensive; pain sharp through the right side; both feet slightly cedematous; urine highly albuminous. P. 104, R. 24, T. 99.2 M., 99.6 E. The physical signs were as follows: marked flattening between right collar bone and nipple; scarcely any expansion on right side; heart's apex normal situation; resonance of left includes sternum to line of junction of inner with middle third of right clavicle, to right of which dullness not absolute on percussion; respiration over dull portion (*i. e.* right side), harsh, weak with prolonged expiration; no moist sounds.

Posteriorly—there was marked curvature of the spine with concavity to the right, opposite base of scapula; right shoulder was lowered, and the angle of right scap. was  $2\frac{1}{2}$  in. from spine, while that of the left was 2 inches above its level and 4 inches from the spine.

Right back on percussion generally dull; respiration weak, with occasional doubtful crackle; slight increase of vocal fremitus and vocal resonance in upper scapula region; over the whole of the left side there was good resonance with exaggerated breathing. The liver was slightly enlarged.

During her stay in hospital this time she lost ground. The renal mischief increased; her appetite failed, and she lost flesh rapidly. At my last examination, submucous rales, with bronchial breathing, were heard at left apex. She left hospital in May. Two months afterwards I happened again to see her. She was in St. George's Hospital. The symptoms had again somewhat improved.

This case is so highly characteristic as to leave no room for doubt as to the nature of the changes that had taken place.

Its chronicity; the long continued one-sidedness of the disease; the slow failure in the general nutrition; the severe paroxysmal cough, accompanied by retching; the character of the expectoration; and, above all, the physical signs: increasing contraction, deadened percussion note, weak bronchial respiration, almost cavernous at parts, all point to fibrosis.

The post-mortem, as far as I know, has not yet taken place, but you may almost draw the outlines of the picture for yourselves.

The hard contracted right lung firmly adherent to the parietes by a dense and much thickened pleura; the indurated and probably pigmented tissue of the lung penetrated by fibrous bands extending into it from the pleura; the bronchi much enlarged, and in some places dilated into cavities; the liver probably increased in size by amyloid degenerations; the kidneys granular, with perhaps some amyloid changes also.

The second case is somewhat similar, but differs in the earlier supervention of pneumonic symptoms at the apex of the sound lung, from which spot there is little doubt the hemorrhages took lapee.

John M., æt. 34, policeman, was admitted into the wards of the Brompton Hospital, under the care of Dr. Douglas Powell, November 30, 1876. He had no hereditary tendency to phthisis. At the age of twenty he had suffered from an attack of pleurisy in the left side, which had confined him to the house for about six weeks, but from which, according to his own statement, he completely recovered and resumed his duties. Shortly after this he began to suffer from a winter cough, which gradually increased in severity. In November, 1873, first noticed a slight hæmoptysis, but so slight as to give him no alarm. Eighteen months afterwards, viz., April, 1875, he had another attack, but more profuse, confining him to bed for some days; this recurred again in August of that year, and in July of the following, four months before admission. On admission the physical signs were noted as follows:

Measurement R  $17\frac{1}{2}$  in.;  $15\frac{3}{4}$  L, below nipple.  
R  $17\frac{1}{2}$  in.;  $15\frac{3}{4}$  L, above nipple.

Left side, marked flattening, and compressed from before backwards; very little movement of left base. Heart's apex, 5th space in.  $\frac{3}{4}$  outside nipple line.

Left side, generally dull. Most resonant interscapular region; respiration weak. Tubular between 2nd and 4th ribs, outside nipple line, where cavernous gurgle heard in cough. Posteriorly, respiration weak.

Right side resonant to centre sternum; percussion hard under clavicle; respiration, harsh here, with slight crackle on cough. Supra specious fossa; slight humid crepitation; heart sounds natural.

P. 88, R. 22, T. 99.8 evg., 98.4 morning.

Expectoration abundant, purulent. No pains in chest. Much shortness of breath on least exertion. No night sweats.

He remained in hospital three months, during which he gained four pounds in weight. On going out he resumed duty, taking a shorter beat and doing



no night duty. The final note in regard to him is as follows: Left sounds drier; right, still slight crackle under clavicle below 2nd rib. Respiration exaggerated. Pulmonary condition, stationary; general condition improved.

In both these cases I would simply call your attention to the apparent complete recovery from the pleurisy, and the absence at first, as far as I was able to ascertain, of any pneumonic symptoms, as evidenced by cough and expectoration. These only supervene after an interval of about a year.

In the third group we have, as the result of the absorption of purulent matter in the chest, hectic fever, amyloid degeneration of the internal organs, and acute tuberculosis.

Associated also with empyœma in children, we occasionally find a catarrhal pneumonia of the base of the opposite lung. Cases of the first and second are, unfortunately, too frequent, and in a brief essay like this require me only to mention their names.

Instances of acute tuberculosis following chronic pleurisy and empyœma are by no means uncommon. The following are the brief notes of a well-marked case. Similar instances may, perhaps, have presented themselves to many of you:

Frank C., footman, æt. 22, was admitted into hospital, February 21st, 1877. Both his parents alive and well; but mother's brother died of phthisis. Has enjoyed good health up till October, 1875, when he was laid up for some time with an attack of pleurisy in the right side. Has never felt well since. A slight tickling cough has remained, expectoration only slight. Occasional sharp pains through right side. Latterly night sweats have supervened. Has felt much worse on past few days. Ten days ago spat up a small quantity of bright blood.

*On admission*:—Skin hot and pungent; cheeks flushed, but face otherwise pale; lips slightly livid; much breathlessness; cough troublesome, but expectoration scanty; bowels confined.

P. 132, R. 34, T. 103.4, M., 104.6, E.

Chest fairly shaped. M. cast. R 15 $\frac{3}{4}$ ; L 16 $\frac{1}{4}$  below.  
R 16; L 16 $\frac{1}{2}$  above.

Right side, percussion generally defective; respiration (everywhere bronchial) with numerous sub-mucous rales; all over left side fairly resonant; respiration bronchial under clavicle, with occasional rale.

His temperature remained very high, and I may say here that salicylate of soda was administered with temporary benefit in reducing the temperature, but in a few days produced so much gastric irritation it was obliged to be discontinued. His case rapidly

assumed a typhoid condition, and he died three weeks after admission.

P. M.—Body much emaciated. Right lung firmly adherent to the parietes, but, towards the base, was a thin layer, about  $\frac{1}{8}$  thick, of caseous material between the two pleuræ. Both lungs much congested and studded throughout with minute grey granulations. A few granulations were also found on the pericardium. A few on upper surface of liver, on peritoneum, covering under surface of diaphragm they were quite numerous. Convolutions of brain were flattened, and membranes very vascular. Numerous granulations in both sylvian fissures.

There can be no doubt, I think, in this case, as to the origin of the tuberculous infection. On a future occasion I hope to be able to lay before you the histories of some cases of empyœma, occurring at the Hospital for Sick Children, Great Ormond St., with their terminations, and to enter more fully upon this portion of my subject. For the present my object will have been attained if, by these few unconnected, and somewhat hastily arranged jottings, I direct attention to a subject which has perhaps been sometimes overlooked, and induce those with larger experience than myself to give the results of their observations in regard to it.

Montreal, December, 1877.

## Progress of Medical Science.

### SIMPLE MODE OF RELIEF FOR FOREIGN BODIES IN THE THROAT.

A British naval surgeon, Dr. Beveridge, states that for foreign bodies in the throat, such as pieces of meat, etc., a simple mode of relief is to blow forcibly into the ear. This excites powerful reflex action, during which the foreign body is expelled from the trachea. The plan is so easy of execution that, if there is anything in it, it ought to be generally known and applied.

#### GROUP.

*Le Monde* gives an account of a case of croup recently successfully treated by Dr. Durodié, by means of scraping the larynx. The method employed was to rapidly introduce the left index-finger into the pharynx, so as more surely to reach the upper laryngeal opening; then, with the right hand, insert a piece of curved whalebone, having a small piece of sponge fixed at the end, which had been soaked in warm water. After moving the instrument up and down three or four times it was quickly withdrawn, and the operation repeated. This took place three times at each *seance*.

The sponge when removed was always covered with *debris* of false membrane. The instrument has a reflex as well as a mechanical action, causing spasmodic movements, which provoke the ejection of the false membrane. In M. Durodié's case the child rapidly recovered.

#### LACERATION OF THE FEMALE PERINEUM.

The following clinical lecture, by Wm. Goodell, M.D., Professor of Gynecology in the University of Pennsylvania, is published in the *Boston Medical and Surgical Journal*. Dr. Goodell said:

"I intend to operate before you to-day for laceration of the female perineum. This accident generally occurs among the poor who are attended by midwives or medical students. Rents of the perineum are called complete or incomplete, according as the sphincter ani is or is not involved. Most commonly the rent is incomplete.

**CAUSES OF LACERATION.**—"The causes of a laceration may in general be divided into two. One cause is the common, faulty mode of supporting the perineum. The diversity of opinion in this matter of support is very great. My advice to you is to make your support or retarding pressure (to imitate as nearly as possible the course of nature) directly to the head itself and not to the perineum. When the perineum is very rigid I relax it by hooking up and pulling forward the sphincter ani with two fingers passed into the rectum, while with the thumb of the same hand I make the needful restraining pressure upon the head. Lacerations from this cause generally stop short of the sphincter ani. Another cause of this injury is a forceps delivery. Why is a forceps delivery so often the cause of injury to the perineum? In the first place, through a false delicacy, many physicians deliver the child under the sheet. They work in the dark, and of course cannot see what they are about. Under these circumstances, in difficult cases, the physician, worn out by direct traction, is very likely to brace one or both of his feet on the edge of the bed. The traction thus exerted is uncontrollable, and when the head passes the brim, which is usually does with a jerk, its momentum cannot be checked before it has torn its way through the perineum. Again, in cases apparently requiring but little traction, the use of the forceps will often occasion a slight tear in the vagina, which the passage of the shoulders prolongs through the perineum. Delivery by the forceps, even in skillful hands, will often produce a very bad rent involving the sphincter ani. My advice therefore to you is that in general, and always with primiparae, you take off your forceps as soon as the perineum begins to bulge, and that you leave the final delivery of the head to the expulsive efforts of the patient.

**THE PRIMARY OPERATION FOR LACERATION.**—"But supposing that, in spite of the greatest care, a rent has been made. What is then to be done? First, discover the rent. You may smile, but you should know that from over-delicacy or carelessness on the part of the physician lacerations are continually escaping notice until it is too late to perform the primary operation; the torn flesh has healed, preserving the rent. You should make it an inflexible rule after every delivery either to look at the perineum or to gauge its thickness between the thumb in the vagina and the index finger in the rectum. If you discover a rent your method should be, immediately after the delivery of the placenta, to pass deeply two, three, or even more wire sutures, securing each one by merely twisting its ends together. Each suture is entered about an inch from the cutaneous margin of the wound, and is made to emerge on the mucous membrane of the vagina very near the edge of the raw surface. The first stitch must always be put in a little below the lower angle of the wound. Should the lochia obscure the parts, dam them back by a sponge pushed well up into the vagina, and don't forget to remove the sponge before you twist the ends of the wires together. Then draw your patient's water, put a pad between her knees, and bind them together. If the rent is incomplete no other treatment is necessary except that of keeping the bowels bound for a week. But when the rent extends to or through the sphincter ani, or when several deep sutures have been introduced, then the same precautions must be gone through with, namely those of drawing off the urine, of binding the knees together, and of keeping the bowels costive, etc., as I shall enjoin upon you when describing the after-treatment of the secondary operation. While warmly advocating the primary operation, I have not found it on the whole so successful as the secondary. Thus by the former I have had two failures so far, by the latter none. Failure in the primary operation is usually owing to the irregular surface of the rent, which prevents exact coaptation, and to the lochial discharges which insinuate themselves between the surfaces of the wound and hinder union.

**EFFECTS OF LACERATED PERINEUM.**—"Let us suppose, however, that, as in the case before us to-day, the laceration was not discovered, until entirely too late for immediate treatment and that the woman has gone about until this day with vulva and anus torn into one great opening. A woman under these distressing conditions suffers untold miseries. The sustaining power of the vaginal column is impaired by such an injury to its perineal abutment, and the bladder and womb tend to sag down. The vulva gapes, it acts no longer as an elastic, airtight valve, and the womb and vagina become

irritated and congested by the air which gains access to them. The air thus sucked up into the vagina is liable to escape audibly, constituting that disorder which the Germans call 'garrulity of the vagina.' Again, rents of this kind are attended with more or less impairment of the sexual function. The sexual act is blunted on the part of the male, and imperfectly responded to by the female. The shortness of the vagina causes the semen to be rejected, and the woman becomes barren. Last and most grievous result of all, there will be a constant involuntary escape of flatus, and an incontinence of the feces when at all liquid. The woman's clothing is soiled without warning: her person becomes repulsive to her husband, and her company undesired by her friends. Seclusion and mental anguish undermine her constitution. To keep her bowels costive the woman is obliged to rely upon daily doses of opium.

**THE SECONDARY OPERATION FOR LACERATION.**—"Having traversed all this extremely valuable ground as a preliminary, I am now ready to speak to you about the secondary operation, and then to perform it in your presence. This woman, five years ago, in her first labor, met with the mishap of having her perineum very badly torn. Her physician, a man of large experience, put on the forceps, and in delivering the head this accident happened, and was allowed to go by unnoticed until too late for the primary operation. I have had the patient thoroughly etherized while I have been talking to you, and put in the lithotomy position. Early yesterday morning she took a full dose of oil, and this morning one grain of opium in order to restrain the bowels from further action. To avoid ether vomiting she has eaten a very light breakfast.

"While the assistants keep the vulva on the stretch I begin by shaving off the hair around the rent, and then passing two fingers into the bowel in order to smooth out the overlying rugous vagina. Next, with a curved pair of scissors, I trim the rectal edges of the rent, and snip off from its vaginal surface a thin paring of mucous membrane. This trimming is continued for an inch and a half up the posterior wall of the vagina, and then the sides of the perineal rent are denuded for a space a little broader and longer than the cicatrix of the original perineum. On account of the vascularity of these parts and the valveless veins I prefer the half-crushing action of the scissors to the clean cut of the knife. Close to the lower edge of the raw surface two small arteries are spurting little streams of blood, but I shall not tie them lest the ligatures should act as foreign bodies and prevent union. By nipping each with a *serrefine* I stay the bleeding. These little clip-springs will be found to be of great service in this operation. I have nipped the skin off both sides, and the wound is now ready to be closed, but before doing so let me carefully sponge

every part of the bleeding surface to see whether any portion of mucous membrane or of skin has escaped the scissors. I see that all the little ridges of mucous membrane have been snipped off, and now I am ready to pass in the sutures.

"A sharply-curved needle held in the jaws of a needle-holder, and armed with silver wire (to avoid the constant threading of the needle with the wire I have passed a fine silk thread through the eye of the needle, and tied a half knot in it. In making my stitches I pass the end of the wire through the loop of the thread, and simply bend it over), is entered nearly half an inch below the lower angle of the wound in the left buttock on a level with the *lower* margin of the anus. By my finger in the rectum I pilot this needle through the recto-vaginal septum, so that by one sweep it completely girds the rectal rent and emerges at a corresponding point of the skin on the right buttock. This suture was first devised by Dr. Emmet, and a very important one it is whenever the sphincter ani is torn through or a limited portion of the recto-vaginal septum is involved. In passing let me enjoin upon you this advice: Whatever the degree of laceration, and whatever the nature of the operation, namely, whether primary or secondary, *the point of entrance and of exit of the first suture should always be fully half an inch below the lowest angle of the wound.* The perineum proper I shall now close by five other metallic sutures. The entrance points of these sutures should be an inch from the margin of the rent, and each suture should pass through the vaginal mucous membrane very close to the edge of the raw surface. After carefully sponging away the blood I pass the ends of the lowest suture through the hole in the handle of the forceps, and, while drawing upon them, firmly push the latter down upon the skin. The adjuster being removed a perforated shot is slipped over the ends of the wire. This is next seized in the jaws of the compressor, and after being firmly pushed home is clamped. Each suture is in like manner secured by a single shot, and the free ends of wire clipped off. Some operators only twist the ends of wire, but I always clamp with shot.

**AFTER TREATMENT.**—"The operation is now ended, but, before removing our patient to her bed, let me empty her bladder. While withdrawing the catheter I keep my finger closely applied to its mouth so that the few drops of urine retained within it shall not escape and trickle over the wound. I also fold up a soft napkin, put it between her knees, and bind them together. I used to advise the employment of a self-retaining catheter in these cases, but it produced in one instance such a severe attack of cystitis by being allowed to remain in longer than proper that I have never recommended its use since. *So I tell you, in view of this possible accident, never to employ the self-retaining catheter, but to have the water carefully drawn twice or*

thrice daily. This can be done without unbinding the knees, namely, by flexing the knees and thighs upon the abdomen, the woman being upon her back, and so introducing the catheter. Our patient's bowels must be kept locked up. Enough opium to ease the uncomfortable tension of the sutures, say one grain every four to six hours, will be enough. If she is annoyed by painful flatulency, which does not yield to teaspoonful doses of the fluid extract of valerian, a flexible catheter should be carefully introduced into the rectum. On the seventh or eighth day I shall cut and remove every suture except the rectal one. On the morning of the ninth day four ounces of warm olive oil will be slowly injected into the rectum, followed two hours later by a soap-water enema. Should hardened feces over-distend the rectum the nurse must break them up either by her finger, a hair-pin, or the handle of a spoon. When the medicine has operated I will remove the last suture.

"After the bowels have been thoroughly opened they should be again locked up for four or five days more, and then be daily kept open by a mild aperient. The patient should have her knees bound together, and stay in bed for at least two weeks, and for a week longer should not go out of her room. During this latter time she should walk about but little, and keep her knees close together. Should a fistulous opening remain, fuming nitric acid should be applied and the sides should be coaptated with sutures."

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TO SUBSCRIBERS.

Accounts have been rendered to all; will they have the kindness to remit the amount due.

In our last number we chronicled as faithfully as the information at our disposal would allow, the various steps which had been taken by the University of Laval and its friends, toward the establishment of a Branch Medical Faculty in Montreal. Absolute accuracy we of course did not claim, but now that a month has passed away, having in its passage brought us much additional information, we are enabled to state that our article in the November number gave, in all its principal details, a true statement of facts. Then the Branch Faculty of Laval was to be composed principally of new men—

only some two or three members of the Faculty of Victoria College having been asked to accept chairs. The determination, however, of those left out in the cold to hold on to their charter and to their affiliation, and to continue as heretofore, with their united opposition to a nine months' course, has most completely changed the position of matters. As we write we are informed that those who almost felt the dignity of the professorial title resting on their shoulders are doomed to disappointment, for they have been quietly dropped, and the Faculty of Victoria College have in a body been transferred to and accepted by Laval University as their Medical Faculty in Montreal. All this is simply to us a matter of Medical news, and as such we give it to our readers. But we cannot help remarking that, considering the reiterated assurances that the Montreal School of Medicine have during the last five months made to Victoria College, that they had no intention of changing their allegiance, their action does seem somewhat singular. As medical Journalists our greatest interest, however, is in the question of the recently threatened attempt at changing the law, compelling a nine months course to be given instead of six, as it has been for a great number of years and is at present. We are, as we have already said, opposed to this. Opposed to it primarily because the country does not demand any such change as expressed through the profession generally or through those engaged in medical teaching. And, secondly, because while those who advocate this change claim that their object is to benefit the student and elevate the standard of medical education, it requires no second sight to say that, while they may try to make themselves believe that such is the case, there are not many who will give them this credit. And why not? Simply because their previous acts do not tend to corroborate this view. Some of them were members of the committee named by the Committee of the House to frame the present Medical Act, and on that committee not one word was said about extending the course to nine months, although Laval University had for years, (we believe since its establishment,) given in its Faculty of Medicine what it calls a nine months course, or three terms of three months each. Surely since that period, one year ago, medical science has not made such gigantic strides as to have overgrown the possibility of compressing it within the six months, nor has there been any noted change elsewhere in the same direction which would make it seem meet for us to follow. On the contrary, Great Britain and Ireland still

give in her Universities six months medical courses; and so it is in every University of the British Dominions save Laval, and she has always been exceptional. If then the law has demanded courses of six months for many years, wherefore the call for the change now? Simply because Laval, being about to extend herself to Montreal, by opening a branch, feels herself in a dilemma. Giving a longer term, although no more lectures than the law requires in Quebec, *ergo*, she must give the same course in Montreal; and to at once meet the threats of those who say, (as many have said) they will not attend a nine months course, she seeks to change the law so as to compel all to give a course similar to her own. If this is not a special piece of legislation in favor of one University, we confess, we never heard of special legislation. Not alone would this legislation be in favor of one University, but it would be to the very great detriment of the two other Universities of this province. Other reasons might be advanced against any alteration of the law with reference to the length of the College term, but we hope that those who have been moving in the matter will see the wisdom of allowing the law to remain as it is. No harm can possibly come to Laval by her making her course in Quebec comply with the existing law, while an extension of the course to nine months, as has been proposed, would be so ruinous to Montreal, as the centre to which the English-speaking youth of the Dominion would come to obtain their Medical education, that any such attempt is sure to bring about a storm that might be difficult to manage. We sincerely hope better counsel will prevail, and that the new Faculty of Laval, *née* the old Faculty of Victoria, will be as firm in their opposition to the nine months course in their new position as the majority were in the old. If so, we have good hopes that the storm, which has lulled, will pass away, and that once more peace and quietness will reign supreme over the Quebec Medico-Political horizon, which has been anything but clear since the meeting at Three Rivers in July last.

#### ANTISEPTIC DRESSING.

At a recent meeting of the Medico-Chirurgical Society of this city, Dr. Roddick read a paper illustrative of the "Antiseptic System of Lister," from which we gleaned the following facts in connection with that method of treating wounds. In the first place, Dr. Roddick spoke of the difficulties that lay in the way of the thorough application of the sys-

tem,—namely, its cost, the time expended in applying the dressings, the attention to the minutiae required, and the trouble there sometimes existed in imparting the necessary enthusiasm to those on whom the care of the cases devolved. He frankly admitted that he had failed on one or two occasions, but had always succeeded in tracing the failure to some cause outside of the system.

Professor Lister is in the habit of using the four following disinfectants:—Carbolic acid, salicylic acid, chloride of zinc, and boracic acid. The first is found the most efficient antiseptic for general purposes, being employed in conjunction with resin and paraffine in the preparation of the antiseptic gauze, and in watery solution of varying strength. The gauze spoken of is applied in dressings of eight layers, the size of the dressing depending on the amount of discharge expected. Between the seventh and last layer a piece of Mackintosh cloth is interposed to prevent the discharge from soaking through the dressing and causing a direct communication between the wound and putrefactive organisms on the outside. The "antiseptic atmosphere" on which Professor Lister lays so much stress is provided for by a steam-spray producer of the most approved pattern, and which Dr. Roddick brought with him from Edinburgh. This consists of a boiler containing water, with a safety valve attached, and fitted with a most ingenious lamp arrangement, so that the heat can be shut off or on at pleasure without extinguishing the flame. A bottle, containing a 1-20 carbolic watery solution, is adapted to the boiler, giving a spray of the strength of 1-40, which has been found by Mr. Lister to be of sufficient strength to destroy organic germs. In the form of one to twenty solution carbolic acid is employed to purify instruments and sponges, and the integument of the part to be operated on. The hands of the operator and his assistants should be thoroughly cleansed in a one to forty solution. The "protection," consisting of oil silk properly prepared, and which is recommended to be applied to the wound to protect it from the too irritating action of the acid, is also dipped in this solution. One of the essential elements of the method is thorough drainage by means of Chassaignac's tubing, of which Mr. Lister uses several sizes, depending on the extent of the wound, or, rather, on the amount of discharge to be withdrawn. This is perforated with large openings, and armed with a loop of silk thread or a double wire, so that its mouth may be held outside of the wound.

Of the other antiseptics employed by Mr. Lister,



the chloride of zinc is that most valued by him. He uses it in a watery solution containing forty grains to the ounce, and finds it especially of service in the cleansing of sinuses and foul ulcers. He also uses it in operations about the anus and mouth, where the ordinary dressing cannot be conveniently applied. Salicylic acid is inferior as a destroyer of bacteria to both carbolic acid and chloride of zinc, but is of eminent service where the patient has a very irritable skin, or where a wound is being too actively stimulated. It is best used in the form of "cream," which is made by mixing salicylic acid by trituration with one to forty solution of carbolic acid until you obtain a fluid of a creamy consistence. Boracic, or boric acid, has the advantage also of being very unirritating, and is chiefly recommended by Mr. Lister in the treatment of ulcers. It is used either in the form of a saturated watery solution, or as boric lint, made by steeping ordinary lint in a boiling saturated solution of boracic acid and allowing it to dry. When properly made, crystals of the acid adhere to the threads of the lint, so that by simply dipping the latter in water you get at any time a dressing of boric acid.

The cases recorded by Dr. Roddick, and which were embodied in his paper, were two very severe accidents requiring amputation, and certainly the results in both cases were most gratifying. One was Cardens amputation, following a railway accident, in a young lad of seventeen, in which the stump was healed on the eighth day without a drop of pus or elevation of temperature. The other was an old man of sixty-five, whose foot was amputated above the maleoli, and on the tenth day all dressings were removed, the stump having entirely healed, also without suppuration or elevation of temperature. With such results as these and many others of which we are cognizant, it is easily understood how Mr. Lister and his supporters can afford to treat with that contempt which is their due, those who endeavor to belittle his system. After all, who are the scoffers? They will be found to be those who are either too indifferent to give it a trial, or, worse, those who have tried the method but in such an incomplete manner as to ensure its unsuccess. The latter are Lister's worst and most determined enemies, and we can only hope, for the sake of fair play, that none of our readers sail in their boat.

#### WYETH'S DIALYSED IRON.

This preparation has now been in use some six

months among the profession in Montreal, and we are stating, we think, not only our individual opinion, but that of every one who has made use of it, when we say, that we regard it as one of the most important of the many additions to our *materia Medica* which have been made during the past few years. The very extensive use to which the various ferruginous preparations are put has been the means of giving to this new remedy a prompt and very general trial, and it is something more than usual, to be able to say, that, in every respect, it has borne out the peculiar advantages which it is said to possess. Those advantages may be enumerated under the following heads: 1st. It is easily administered, the dose being small. 2nd. It has no unpleasant taste or smell. 3rd. It does not irritate the stomach. 4th. It has no effect on the bowels, producing neither constipation nor diarrhoea. 5th. It does not blacken the teeth. The value which these peculiar characteristics imparts to it over the other ferruginous preparations must of course be evident to every one who gives it a moment's consideration.

According to a circular recently issued by Messrs. John Wyeth & Bro., of Philadelphia, we are informed that, in the manufacture of Dialysed Iron, they avail themselves of two known principles. The first is connected with the remarkable property possessed by the chlorides in general of combining with the oxides to form oxychlorides, which are usually soluble, and in which the proportion of oxide is very large. As regards iron, particularly, one equivalent of its perchloride may, under suitable conditions, combine with thirty or more of the oxide, giving a soluble oxychloride, the formula of which would be  $\text{Fe}_2 \text{Cl}_6 \text{Fe}_2 \text{O}_3$ . To get rid of the hydrochloric acid, and obviate the usual inconveniences of ferruginous preparations, they take advantage of the second principle—that of the unequal diffusibility of hydrochloric acid and peroxide of iron, the latter belonging to the class of colloid bodies; and, by means of the dialyser, they completely separate this hydrochloric acid; so that, as a final result, they have the thirty equivalents of soluble peroxide of iron contained in a very small volume of water. When this operation has been conducted with care, the Dialysed Iron obtained is simply a neutral concentrated solution of the oxychloride of iron (ferric oxychloride,  $\text{Fe}''' \text{Cl}_{23} \text{Fe}''' \text{O}$ ) holding in combination the higher oxide of iron (ferric oxide or sesquichloride). It does not contain a particle of ferric hydrate, as some have affirmed. Its chemical

arrangement is probably best expressed by the formula  $\text{Fe}_2 \text{Cl}_6 23 \text{Fe}_2''' \text{O}_3$ . It should be added, however, that chemists, as yet, are not fully agreed as to the exact formula. Each fluid ounce of the solution contains twenty-four grains of iron.

Dialysed Iron is a permanent, neutral, inodorous liquid, of a deep red color, but transparent in thin layers. It has none of the styptic taste so common and disagreeable in ferruginous preparations. The solution should not be allowed to freeze, as this has the effect of thickening it. But if, by evaporation, freezing, or otherwise, it becomes too thick or gelatinous, the addition of a few drops of *distilled* water will bring the solution to the proper consistence; but water containing salts precipitates with it. With arsenical salts, Dialysed Iron acts with great rapidity—even more quickly than the freshest preparation of the precipitated oxide of iron, which has heretofore been held to be the surest antidote for arsenical poisons introduced into the stomach.

Dialysed Iron may be administered for months together for all the purposes for which ferruginous preparations are usually exhibited. Becquerel says of it—and his observations are confirmed by physicians of eminence everywhere—that “it produces neither heartburn, diarrhoea, constipation, eructations, nor, in short, any gastric disturbance; and, which is a matter of much importance, it *never blackens the teeth*.” It is especially in anæmia, chlorosis, palpitations, chronic diarrhoea, gastralgia, dysmenorrhoea, etc., etc., that its use is indicated.

But its *specific* virtue is as an antidote for poisoning by arsenic. Dr. H. C. Wood, in the *Philadelphia Medical Times*, July 21, 1877, says, “Judging from its behavior in the test tube, it is even a better antidote to the poison than is the freshest precipitated oxide. Experiments upon animals are, however, necessary before a final judgment can be reached upon this point.” When Dialysed Iron is taken into the stomach, gelatinous ferric hydrate is produced. It also possesses the great advantage of being always ready for immediate use, and, possessing the virtues of iron in general, will hereafter be found in every drug store and in the saddle-bags of every country physician.

The dose of Dialysed Iron, for tonic purposes, is from five to twenty drops four or five times daily. It may be taken, however, without inconvenience in doses several times larger than those stated, but to no advantage, as only a certain amount can be absorbed into the system.

Dialysed Iron is best administered by itself upon

sugar, or mixed with some simple syrup which is free from an acid, as an acid admixture converts the preparation into a salt of iron. It may also be conveniently given in wine, or in coffee, etc.

We can, as we have always stated, commend this preparation from considerable actual experience of its use. See advertisement on page facing last page of reading matter.

#### *Retarded Dilatation of the Os Uteri in Labor.*

By ALBERT H. SMITH, M.D., Philadelphia.

This little brochure was offered to the Medical Society in the form of two papers during the month of August 1877.

The first paper discusses “Delays arising from conditions of the cervix,” “usually included under the general name of rigidity of the os uteri.” This rigidity is treated as either *active* or *passive*. The active form is well discussed and affords a good summary of the treatment generally adopted for the relief of this form of delay. There is, however, a statement in regard to the manner in which the dilatation of the os is effected previous to the rupture of the membranes. It is a well known fact that the head of the child recedes from the os at the commencement of each pain and is not “driven against” it as stated by the author. The paramount value of opium is insisted upon, but the importance of determining whether such labor is premature or not is overlooked. The investigation of the foundation cause, viz., an immature condition of the decidua, is not even mentioned. When the labour is even a few days before time the opium will often enable the patient to reach her full term and have an easy accouchment. The forcible dilation of the os should never be resorted to unless the uterine pains cannot be controlled or labour has to be promoted for urgent reasons. In such cases the writer well insists upon the danger of incisions of the os, and the advantages of a properly constructed forceps, for both dilatation and extraction.

The author is not so happy in his remarks concerning the “forcing open of the os by traction with the finger upon the anterior lip.” The dangers of laceration are quite as great whether produced by the finger or sponge tents. Such efforts are useless for the purpose spoken of, and can only irritate the lip and render future dilatation more tedious. It also

renders the lip more apt to be caught between the head and brim of the pelvis. The author overlooks those cases where the os is prevented from dilating on account of adhesions between the decidua and uterine walls around the inner os. If labor is actually begun, early rupture of the membranes hastens dilatation and expedites delivery. With regard to obliteration of the os uteri, the author does well to insist upon caution and delay before resorting to incision.

The second paper deals with "delays connected with contraction of the uterine body and also those resulting from faulty relations of the presenting mass with the pelvic strait. One class of cases of inertia are spoken of as those where "the contraction is vigorous and causing suffering, recurring regularly with feeble expulsive effect but the os uteri does not dilate." This description corresponds to what is met with in cases of irregular uterine contractions due to adhesions between the muscular wall of the organ and the decidua. Uterine rest is as valuable here as in any case, and therefore opium should be resorted to before either rupturing the membranes, resorting to "hot toddy, or milk punch." This last quotation we do not think is good advice, and should not be resorted to, except where stimulants are indicated. The author speaks of the great value of bi-sulphate of quinine as a uterine tonic, and his experience of its value should induce a trial of its virtue by the profession.

In extraction with the long forceps (and of these instruments Hodge's is by far the best) the author very properly insists upon traction being made in the axis of the brim where the head is placed. This desirable result is obtained by "exerting the force upon the lock of the instrument." "Pressure is to be made with the palm of the left hand upon the lock, or, in some forceps, even upon a portion nearer to the head than the lock, that pressure being directed in a line as nearly as possible, not parallel with but identical with the line of the pelvic axis at that point where the head may be." The production is worthy of a careful perusal, and we can cordially commend it to our confreres. It is to be had of Messrs. Dawson Bros., Montreal.

#### MEDICO-CHIRURGICAL SOCIETY.

MONTREAL, DEC. 14th, 1877.

The regular fortnightly meeting of the Medico-Chirurgical Society of Montreal was held in the

Library of the Natural History Society this evening. The President, Dr. Francis W. Campbell, was in the chair. There were present: Drs. Ross, Blackader, Edwards, Buller, Parks, Nelson, Osler, Reddy, Kollmyer, Loverin, James Bell, Alloway, Roddick, Richard MacDonnell.

The minutes of the previous meeting were read and approved.

Dr. OSLER exhibited the following pathological specimens:

I. A lung completely excavated, the result of chronic phthisis. Lung tissue was present only at the root. In the same body, that of a girl of nineteen, tubercle of an early stage was found in the intestines, and in the fallopian tubes. This last condition, Dr. Osler explained, was a rare occurrence without co-existent deposit in the peritoneum.

II. Ulcerative colitis. The case had presented the appearances of a general enteritis. Innumerable ulcers were present over the whole colon. Many of these had eaten their way down to the peritoneum, so that, without tearing, it could not be detached. There were, however, many points of ante-mortem perforation. In the same patient there was extensive deposit of carbon particles in the lungs.

III. A pedunculated polypus of the uterus, springing from the fundus and appearing in the vagina. In the same body there was a chronic abscess in the broad ligament which had burst into the bladder, and had given rise to pus in the urine. The liver was large (wt. 6 lbs.), and there were numerous stones in the gall bladder, one of these occluding the duct.

Dr. Ross stated that the patient from whom these last specimens had been procured was given into his care a few days before her death. She was thirty-five years of age, sallow and anæmic in appearance. The symptoms were mainly septicæmic. She suffered from chills and high fever; had a rapid pulse and a coated tongue, and was extremely feeble and exhausted. For the last two years there had been excessive menorrhagia. A digital examination of the uterus was made. The finger could be freely passed around the tumour, and it felt like the cervix itself. Dr. Ross fancied that it was malignant. The appearance of pus in the urine failed to mislead him. From the absence of any symptoms pointing to the kidney he could exclude renal disease. The hepatic enlargement produced no symptoms. There was no syphilitic history.

Dr. BLACKADER read a paper on "some of the terminations of pleurisy." He stated that, as yet, the sequelæ of pleurisy had not received the attention they deserved. Pleurisy more frequently precedes phthisis than is generally supposed. The sequelæ may be divided into three classes.

I. Those arising merely from mechanical compression.

II. Those arising from new growths in the pleura.

III. Those arising from purulent absorption.

The effects of the mechanical compression exerted on the lung by bands of adhesion are more serious than is generally supposed. Mere bands cause slight

interference with respiratory action, but may give rise to compensatory emphysema. A case was cited where pleurisy which had occurred ten years before was said to prevent the proper expansion of the air cells in the upper part of the lung. Bronchitis with emphysema was the result.

Adhesions over the whole pleural surface do most injury by giving extra work to the sound lung. The history of two cases was read. In one of these, fibroid changes, the result of an old pleurisy, had been found after death. In the other, this condition of lung was strongly suspected. Chronic pleurisy so commonly gives rise to hectic fever, amyloid disease of the viscera, phthisis, etc., that Dr. Blackader did not dwell to any extent on this part of the question, inasmuch as these sequelæ were familiar to every member present.

Dr. OSLER having complimented Dr. Blackader on his having read such an excellent paper, stated that pleuritic bands were so common that it was a rare thing to find a body without them, and mentioned a case in support of the view taken by Dr. Blackader, that fibrosis of the lung was due to extension inwards of fibrous bands.

Dr. ROSS said that the influence pleuritic attacks exerted upon future diseases was a matter often overlooked. He mentioned a case of acute tuberculosis following empyema. In this case there was also caries of the bones of the ears, which gave rise to troublesome brain symptoms.

The PRESIDENT (Dr. F. W. Campbell) was of opinion that pleuritic adhesions were unusually common in Canada, and attributed it to sudden changes in the weather. In the examination of candidates for life insurance he was struck with the large number of persons coming to him with flatness of one side of the chest and a variable degree of dullness, traceable to pre-existent pleurisy.

A vote of thanks to the reader of the paper was moved by Dr. OSLER and seconded by Dr. REDDY.

Dr. NELSON wished to obtain information with regard to the treatment of phthisis by blood drinking. Some time ago he advised a patient to drink blood. After taking about one half or one third of a teacupful she became quite giddy, and acted exactly like a drunken person. This state lasted some little time and then passed off. She continued the treatment for some weeks, the dose was diminished, but the same effect was always produced. There was great improvement in the phthisical symptoms.

The PRESIDENT (Dr. F. W. Campbell) had made use of this treatment in three cases. Great improvement followed. He had never seen such effects produced as those described by Dr. Nelson. He then related the particulars of the death of Dr. W. P. Smith, the oldest English practitioner in Montreal. Death was extremely sudden, and was thought to be due to cardiac syncope. He concluded his remarks by giving the history of a case of membranous croup in his practice in which tracheotomy had been performed by Dr. Drake. The child lived until the second day after the operation. On the morning of its death a patch of false membrane as large as a sixpence

appeared on its lower lip. There was no false membrane on the throat. Two other children in the same house had false membranes appear in the pharynx simultaneously with its appearance on the lip of the child operated upon. They had previously been under treatment for severe sore throat, but no false membrane was discoverable, although looked for by Dr. Drake and himself. He was following the treatment suggested by Dr. Bell of Glasgow, and with every prospect of a successful result, as both little patients were doing well. He had used this treatment in several severe cases of diphtheria, and felt that good results in several was undoubtedly attributable to the treatment.

The Meeting then adjourned.

RICHARD MACDONNELL, B.A., M.D.,  
Secretary.

#### SCRIBNER'S MONTHLY AND THE ST. NICHOLAS.

By special arrangements with the publishers, we are enabled to offer to our subscribers *Scribner's Monthly*, one of the very best monthly magazines published in America, at the extraordinary low rate of two dollars a year, the subscription price being \$4.00 a year. We can with confidence recommend this magazine. Any subscribers desiring it will please forward their names and the amount of subscription. The *St. Nicholas*, a monthly magazine issued by the same firm, and more particularly intended for the younger members of society, and publish at \$3.00 a year, we are also able to offer at the greatly reduced rate of \$1.50 a year. It is a first-class juvenile magazine, profusely illustrated, and has obtained an enormous circulation.

#### BRANT COUNTY MEDICAL ASSOCIATION.

At the regular quarterly meeting of this Association held in the Kerby House, Brantford, Sept. 4th, the following gentlemen were elected officers for the ensuing year: Dr. Philip, President; Dr. Burt, Vice-President; Dr. Harris, Secretary-Treasurer.

Efforts are making in Russia to abolish the law which obliges a physician to visit any one who may call on him. As it now stands, he who refuses to go is liable to a fine of from five to ten roubles for the first offence, of from ten to fifteen for the second, and of from fifty to one hundred for the third. Moreover, any physician so offending, who may be in the service of the government, is liable to be dismissed. The worst of it is that the law is no dead letter, but is actually enforced. In 1869 a similar law was repealed in Prussia.

## PERSONAL.

Horace P. Yeomans, of the Village of Mount Forest, Esquire, M.D., to be an Associate Coroner in and for the County of Wellington.

Thomas Smith Walton, of the Village of Parry Sound, Esquire, M.D., to be an Associate Coroner in and for the District of Parry Sound.

Dr. G. S. Ryerson, of Trinity Medical School, has been appointed house surgeon of the Royal London Ophthalmic Hospital, Moorfields. He is also clinical assistant at the Central London Throat and Ear Hospital, Gray's Inn Road.

—Dr. Alfred S Taylor has resigned the office of Lecturer on Medical Jurisprudence and Toxicology in Guy's Hospital. This appointment was conferred on him by the treasurer and governors of the hospital in March, 1831. He has, therefore, held it continuously for the long period of forty-six years. Dr. Taylor held, also, the office of Lecturer on Chemistry, from 1832 to 1870, a period of thirty-eight years.

## DOMESTIC INTELLIGENCE.

*A private Medical Home for Opium Habitues.*—Parrish Hall, Brooklyn, N. Y., which has just been opened, offers to those of either sex, who may desire to avail themselves of its advantages, an asylum for the treatment of the disorder to which it is *exclusively* devoted. It is beautifully situated in a suburb of Brooklyn, and it is intended to make it an attractive home for its inmates.

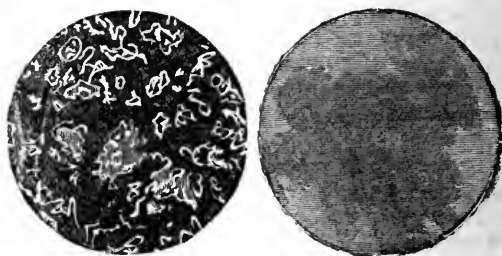
*Milk of Magnesia*, by Charles H. Phillips, Chemist, New York.

As I believe that Physicians need only to be made acquainted with the merits of Milk of Magnesia to accord it their professional sanction, I invite their attention to its advantages.

It is the only perfect hydrate, or complete combination of Magnesia and water, by a new and improved process, and is not, as many suppose, calcined Magnesia triturated and suspended by a mucilaginous or other auxiliary body. Microscopic examination of it, when mixed with distilled water, discloses a uniform cloudiness, but no separate particles of the alkali. Being a hydrate, it is far more efficacious than the calcined and carbonated preparations of Magnesia, which are insoluble, since the hydrate form is that in which combinations are most readily effected in the stomach. In illustration, take the action of the Hydrated Sesqui-Oxide of Iron, the antidote to Arsenic, which it decomposes and then unites with, as Arseniate of Iron. The Lactate of Lime, the Phosphates and other hydrates, exemplify the above fact. It is claimed that the Milk of Magnesia combines with and neutralizes the Lactic, Lithic, and

Uric Acids, which are generally admitted to be the exciting causes of Gout, Rheumatism and Gravel. It is, moreover, susceptible of the most perfect homœopathic distribution, since a single drop amalgamates completely with a tumblerful or more of water.

The use of Milk of Magnesia is free from the risk attending that of the undissolved Magnesias, which form hurtful concretions in the stomach and bowels—a fact which renders them peculiarly unsuitable to the delicate infant organism. The perfect smoothness and milk-like taste of this Magnesia, on the contrary, make it the best of all Antacids, and, whether used for children or adults, physicians who test it will find that this hydrate possesses all the medicinal properties of Magnesia in a much higher degree than the calcined and carbonated preparations of that important alkali, without any of the above objections.



The above is an exact representation of the several calcined and carbonate of Magnesias of the best manufacture and repute, both English and American, hitherto sold by druggists, compared with Milk of Magnesia. These samples have been in so-called solution (20 grains to the ounce) over fifteen months up to the time of writing. The cuts exhibit the fractional part of a single drop magnified 250 diameters; and we would call attention to their appearance, showing the undissolved precipitates and particles with terrible distinctness, and then desire a comparison with the Milk of Magnesia preparation, which is also given, similarly magnified, and which shows the Magnesia, like a mist or vapor, perfectly free from the objectionable precipitates, and *entirely dissolved*.

Thus, in calling the attention of the profession to the Milk of Magnesia, I present it with an entirely new therapeutical agent, which both Physicians and Pharmacists will readily appreciate.

Milk of Magnesia is sold in 8 and 20 ounce bottles; the latter size will be found very convenient for dispensing. It is compatible with all compounds and preparations in which the ordinary Magnesias have hitherto been used.

Physicians wishing to try the Milk of Magnesia can obtain a supply from Devins & Bolton, Montreal.

## BIRTHS.

In Toronto, on the 8th Sep., the wife of Dr. J. H. Burns of a son.

## MARRIAGES.

In Montreal, on the 3rd inst., at St. George's Church, by the Very Rev. Dean Bond, Kennet W. Blackwell, of Belleville, to Fanny Coates, youngest daughter of R. T. Godfrey, M.D.

## DEATH.

In Montreal, on the 13th December, W. P. Smith, M.D., the oldest English practitioner in Montreal.



## Original Communications.

*Midwifery Statistics.* By A. A. FERGUSON, M.D., of Franklin Centre, Que. (Read before the Medical Association of Northern New York, Malone, Nov., 1877.)

The statistics which I offer have been gleaned from the fields of rural practice, and in this particular differ from the statistical tables we generally see, inasmuch as the latter are taken either from the practice of city physicians or from hospital reports, that is from cases occurring in the upper and lower classes—the extremes of society. Here at any rate extremes meet, for far apart as they are socially, yet physically are they near, and the common ground on which they meet are enervation and defective vitality; in the one arising from luxury and idleness, in the other from want and overwork. Country practice introduces a middle-class, in which, if we find work, and sometimes overwork, we also find a diet nutritious and ample enough to appease the appetite which that work has provoked. This equilibrium between demand and supply will probably account for the greater weight of the infants born in the country, as well as for the preponderance of male births.

*Presentations.*—Of a total number of 300 cases, there were 284 of vertex presentation. I regret that I have not kept a note of the different positions usually noted under this head. Of the remaining 16 cases, 2 were of the arm, 8 of the breech and 6 of the foot.

*Results:*—4 mothers died, 2 from epileptic convulsions, 1 from cerebral congestion and 1 from peritonitis. 8 children were born dead. The cases of arm presentation were favorable to the mother; 1 child died. In the footling presentations the results also were favorable to the mother, but 2 of the children were lost. The breech presentations were favorable to both, though one of the children (premature) was still-born. Ratios of vertex presentations, 94 p. c.; arm, 1 in every 150 labors, or 0.6 p. c.; breech, 1 in 37½, or 2½ p. c.; foot, 1 in 50, or 2 p. c. Of deaths:—mothers, 1 in 75, or 1.3 p. c.; children, 2½ p. c.

*Births.*—296 were single, 4 cases producing twins. In one case the mother had twins twice in succession. Of the 8 twin children, 3 presented by the foot. Ratio of twin cases, 1 in 75.

*Funis.*—Prolapse of the funis occurred twice, and was not returned. Results favorable:—1 born

alive, the other still-born but resuscitated. The cord was found coiled round the neck in 64 cases, or about 1 in 5. Around other parts of the body in 8 cases. This complication existed in 40 males and 32 females.

*Sex.*—Of 304 children, 176 were males and 128 females, an excess of males of 16 p. c.

*Weight.*—The weight of 180 children was correctly ascertained: 4 weighed from 3 to 4 lbs.; 6 from 4 to 5 lbs.; 12 from 5 to 6 lbs.; 22 from 6 to 7 lbs.; 24 from 7 to 8 lbs.; 56 from 8 to 9 lbs.; 38 from 9 to 10 lbs.; 10 from 10 to 11 lbs., and 8 from 11 to 12 lbs. Maximum weight 11¾ lbs.; minimum, 3¾. Average weight of male, 8½; of female, 8½ lbs.

*Placenta.*—In 182 cases, the placenta was expelled naturally within 5 minutes. In 68 from 5 to 10 minutes, in 24 from 10 to 15 minutes, in 10 from 15 to 30 minutes in 12 from 30 to 60 minutes; in 2 cases 2 hours. 2 exceeded that time and were extracted by hand.

*Duration of Labor.*—Longest time, 96 hours. This was rather an uncommon case, the birth being that of a monster-female, and of course born dead. The shortest time 1½ hour, and occurred in a case of twins, both children were born within 2 hours. The average duration of male births was but very slightly in excess of that of females. The average duration in 200 cases was 10 hours. Where cord coiled round the neck the average duration was 13 hours.

*Version.*—Podalic version was performed 3 times; results favorable to 3 mothers and 2 children.

*Forceps.*—These were applied in 30 cases, or 1 in 10. Epileptic convulsions called for their use twice, and though resulting favorably to the children, both mothers subsequently died. In four instances the children were born dead.

*Craniotomy.*—No case calling for this operation has occurred in my own practice, but I have been twice called upon to perform it, both cases occurring in the practice of unlicensed practitioners. In the first case the head had become so impacted that it was impossible to pass the forceps. The mother, a primipara, had been thirty-six hours in labor, and so severe were the pains that rupture of some of the minute bronchi had taken place, producing a fearfully emphysematous condition of the face, arms, etc. Fearing lest rupture of the womb should occur, I resorted to craniotomy. In this instance the mother made a good recovery. The second case was that of a multipara. On my arrival I found that

labor had continued for twenty-four hours; that the advance of the head had not been in proportion to the severity of the pains; that the pains had suddenly ceased; that the administration of ergot and stimulants had failed to produce any effect. Upon examination I found the patient terribly exhausted, vomiting, difficult respiration, and no labor pains. My notes do not state, nor can I now remember whether the forceps were used or not. Craniotomy was had recourse to, but the mother died within an hour after the operation.

*Monsters.*—Two cases. The first, a female, had no neck; the head squatting on the trunk and bent back so that the occiput seemed to be attached to the dorsal vertebrae, consequently its face was where the top of the head ought to have been. The second, also a female, had no forehead: and on the top of its head was a peculiar fungoid growth, with an aperture through which the finger could be thrust down to the brain. Both children were born dead.

*Remarks.*—Ergot I use very sparingly. Chloroform I have never used.

My patients are allowed to choose that position which seems most comfortable. My French patients prefer a half-sitting position on the floor; the English prefer the bed or a lounge, lying either on their side or back. I never interfere during the first stage of labor; but if the second is likely to be prolonged, thereby exhausting the mother and endangering the life of the child, I at once use the forceps, from the use of which I have never seen any ill effects. I never support the perineum, for gentle pressure is totally inadequate to prevent rupture, and excessive support, while retarding delivery, is apt to produce the laceration we are so anxious to avoid.

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## Progress of Medical Science.

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### A NEW TREATMENT OF CATARRH OF THE BLADDER.

Prof. Dr. G. Edlefsen, of Kiel, publishes in the *Deutsch. Archiv. Klin. Med.* XIX, 1, 1877, a long essay on the treatment of catarrh of the bladder. The author first considers the previous and prevalent methods of treating this affection, and recommends a new treatment, which has proven of signal efficacy in his hands.

The view lately advanced that the best method of treating cystitis, even acute cases of it, consists in the introduction into the bladder, through the urethra, of water or medicated fluids, is not in accordance with the author's observation. There are connected with this treatment dangers which have induced the author to limit it to cases in which

internal general medication has failed, that is to old and obstinate cases.

The urine is a very sensitive solution of highly decomposable substances, and it becomes all the more sensitive, and all the more inclined to putrefactive changes when it contains, as in cystitis always white blood corpuscles, albumen and mucin. Besides, the mucous membrane of the bladder is exceedingly sensitive, and nothing acts upon it more injuriously, at least when it is in a pathological condition, than alkalinity, and above all things the ammoniacal alkali of the urine. In spite of the most scrupulous care and cleanliness—the experience of catheterization has abundantly proven it—the entrance of minute organisms cannot always be prevented, and once entered, those organisms, in their swift reproduction, speedily excite or accelerate decomposition of urea, which in turn mingled with blood (pus) serum, leads to alkalinity of the urine. Thus damage is inflicted upon the mucous membrane by the very means employed to prevent it. Hegar has reported a number of mishaps with the local treatment of catarrh of the bladder. But entirely aside from this question, the author claims that that treatment should have the preference which is the least severe, and this is the case with medication by the stomach, provided such medication exercise no injury upon any organ of the body. The author subscribes with his whole heart to the principle established by Prof. Dittel, of Vienna, to the effect that no instrument should ever be introduced into the bladder in cystitis, unless imperatively necessary. There are cases of cystitis attended with urethral structure of high degree, in which the introduction of fluid is impossible, and yet the treatment of the cystitis is just as satisfactory.

The new remedy which the author employs, is the chlorate of potash. In the dose required, this remedy exercises no bad effect either upon the stomach or any individual organ of the body, and from the observations made as to the effect of this agent, after its ejection with the urine, upon the mucous membrane of the bladder, the author believes that it will eventually be used by injections into the bladder wherever injections are permissible. The most effective remedies hitherto employed besides water irrigation and diet regulation, were oil of turpentine and balsam of copaiba. "Whoever has used these agents must agree with me when I maintain that there are but few cases of vesical catarrh which resist these agents, and these cases are either due to tuberculosis, cancer or other incurable disease, or they are cases of very long standing, before having been submitted to this treatment. No other remedy, according to the author, will so quickly render acid the alkaline urine of cystitis as the oil of turpentine, and in the second rank, the balsam of copaiba. They are now not to be confined, as Felix v. Niemeyer maintained, simply to the chronic cases; they furnish the best results in recent cases also. The author always prescribes the balsam of copaiba so soon as

the first bladder symptoms present in gonorrhœa; in acute cystitis from other cause, when the disease is only of a few days duration, he gives the oil of turpentine, and in the rule but a few days continued administration suffices for a cure.

When we remember that the normal reaction of human urine is acid, that the mucous membrane of the bladder is continually bathed by acid urine, we may readily understand why an alkaline urine is damaging. The re-establishment of the normal reaction would seem thus to be an indication in the treatment of catarrh of the bladder. The mineral acids do not suffice to effect this reaction, but the turpentine oils introduced into the stomach accomplish it in a few hours, except in the most obstinate and rooted cases. The catarrhal secretion is also diminished by it, the acid reaction reacts in turn upon the cervical mucosa, and the subjective manifestations, in the rule, speedily disappear.

How is it then—in contradiction to this theory—that the alkaline mineral waters have always enjoyed such a reputation in the treatment of catarrh of the bladder? Lebert, as is well known, boasts of bi-carbonate of soda as a specific almost. The author would not attempt to solve this question altogether, but he thinks the chief advantage of the waters is the quantity and consequent dilution of the urine and irrigation of the wall of the bladder.

But it is not to be forgotten that turpentine sometimes irritates and inflames the kidneys and the bladder, and may even induce hematuria. These accidents are, however, so rare as not to interfere with the administration of turpentine and copaiba in the rule, unless there are complications with ulcer of the stomach, catarrh of the stomach, dyspepsia or inflammation of the kidneys. The other remedies recommended, *folia uvæ ursi*, salicylic acid, benzoic acid, etc., are occasionally of value, but cannot be relied upon.

The new remedy the author recommends is chlorate of potash. He recommends it after thorough and conscientious trial and with full conviction of its value; it is a rational remedy in every way, it never damages the stomach or any other organ. It substitutes turpentine perfectly in cases where turpentine cannot be given.

That the chloric acid salts, when administered internally, pass into the urine, was demonstrated in 1856 by Lambert. The value of the chlorate of potash in affections of the mouth and pharynx leads the author to their administration in affections of the bladder, the epithelium being in both cases alike of the pavement variety. The action of this remedy seems confined to this variety, as it has no effect upon the trachea or bronchial tubes. Its action is not to be explained by simple contraction of the muscular coat of the vessels, as it not only reduces the hyperæmia and catarrh, but also closes ulcers over quickly as if it exercised a specific action in the reproduction of epithelium. The author's results were extraordinary, still there are cases in which he failed with it, and was compelled

to resort to turpentine and copaiba. He orders for adults usually: potass., chlorat. 15.0, aqua., dist. 300.0, of which a tablespoonful every two or three hours. He lays stress upon the prescription because it is necessary to bring the patient under the influence of the remedy quickly. Should the taste of the drug after long administration become insipid or sickening, it may be corrected by using cherry laurel as a vehicle (10.0—300.0); any syrup should be avoided. The pus begins to disappear from the urine after its use very quickly—an important difference from the action of salicylic acid—and the subjective distress is lessened or disappears even before the pus has entirely vanished. The acid secretion is restored, but not so quickly as after turpentine, but the restoration of the normal reaction, the reproduction of a normal mucosa with normal epithelial cells, with corresponding diminution of the catarrhal secretion, constitute a cure.

#### A CONTRIBUTION TO THE THERAPEUTICS OF MIGRAINE.

(Read before the Section on Practice of Medicine in the New York Academy of Medicine, Nov. 20, 1877.)

By E. C. SEGUN, M.D., President of the New York Neurological Society.

GENTLEMEN:—The contribution to the therapeutics of migraine which I have the honor to read this evening, will probably strike you as very fragmentary and inconclusive, but I would ask you to consider in a charitable spirit that it is the result of only a few hours' work, and that it is intended as a suggestive rather than a didactic and formal essay.

So short has been the time which has elapsed since I was asked to participate in this evening's work, that I have not been able to collect scattered notes of cases and to make inquiry of former patients; both of which would have been necessary had I wished to base my statements upon statistics. At some future time it may be possible to supply the data upon which the succeeding assertions rest.

Briefly stated, my thesis is that by the long-continued use of *cannabis indica*, migraine or sick-headache may be cured, much relieved, or mitigated in severity.

This idea is not by any means original with me, but was brought out by an English physician, Dr. Richard Greene, who published a short article upon the subject in *The Practitioner*, Vol. IX., p. 267, London, 1872. After reading the article I immediately began using the remedy, *cannabis indica*, as directed by Dr. Greene, and have continued to do so ever since. My former partner, Prof. William H. Draper, has also used the treatment somewhat during the same period of time; and both of us have been much gratified by the results obtained. I may add, that some inquiry has convinced me that, in this country at least, the article passed unnoticed, and the plan has not been generally tried.

Before proceeding to give details concerning the treatment, it might not be amiss to recapitulate the diagnostic characters of migraine or sick-headache. This affection is essentially neuralgic in its chief manifestation, viz., a severe or excruciating pain in the head and orbit, but not along the superficial branches of the trigeminus. It affects both sexes, from the age of six or ten years to that of forty or fifty. In some patients it makes its first appearance at puberty, and terminates before the sixtieth year. In females it may, after undergoing aggravation or transformation, cease at the menopause. Very rarely does the disease cease before thirty, and still more rarely does it first appear at that age.

Migraine is pre-eminently an inherited disease, perhaps more directly so than any other neurosis. I possess numerous tables of families in which many members of three generations were affected.

Migraine is periodic in its manifestations, nearly as much so as epilepsy; patients have attacks every two months, or monthly, or every week—seldom several in a week. In some women the periodic return of migraine coincides with menstruation.

An attack of sick-headache usually begins in the very early morning, and lasts all day—seldom longer in uncomplicated cases. In many cases certain premonitory symptoms precede the occurrence of pain. The day or evening before the attack some feel unusually bright and well. At the earliest waking on the day of attack there may be chilliness, or numbness of a limited part of the body, dim vision, colored vision, or hemiopia. These optical disorders are of exceeding interest, and are best observed in those patients whose attacks begin some time after rising. They usually last less than half an hour. Although amblyopia, hemiopia, photopsia are often very serious symptoms, yet in migraine they lose their prognostic significance. In other persons nausea is an early symptom. Pain follows upon the above disturbances and sometimes makes its appearance without them. It is usually in one side of the head, hemicrania; deeply placed "in the brain" or "back of the eye," as patients tell us; it grows in intensity, is sharp, or beating, or pressing, and may reach such a degree of severity that patients strike their heads violently against hard objects, use chloroform, or beg for hypodermic injections of morphia to obtain relief. During the existence of this pain, which may extend to the rest of the head, there is hyperæsthesia of the eye and ear, great irritability, pallor of the face, cool skin, intense nausea, and severe vomiting. So prominent a symptom is vomiting, so early does it appear, and so abundant is the matter ejected, that the sufferers generally, and, I regret to say, physicians occasionally, consider the headache as caused by "biliousness;" thus reversing the true order of cause and effect. For a

while after vomiting there may be some relief to the suffering.

Toward evening the pain diminishes in intensity, changes its character to a dull general headache, and after a night's sleep the patient awakes quite well; in many cases feeling better than before the attack. Sometimes, however, in gouty subjects, or in women at the menopause, headache more or less typical will endure for two or three days.

It should be added that there are cases in which no nausea or vomiting appears; and patients are disposed to separate these from the category of sick-headache, and speak of them as "nervous headaches." I believe that these two varieties are of the same general kind,—of the migraine type.

It would be out of place in this short paper to trace out the varieties and transformations of migraine, and I have only said enough of the symptomatology to make it unmistakably clear what are the cases in which the plan of treatment about to be presented is applicable.

The pathology of migraine is one of the most open questions in medicine, and I can only briefly state my own opinion, reached by a careful study of physiological considerations and clinical data. I believe, with Anstie and many others, that a lesion (at present undemonstrable) exists or occurs in those parts of the pons and medulla oblongata which give origin to the sensory roots of the trigeminus. Various systemic states, and various irritations from the external world, the abdominal organs, the cerebrum, serve to provoke the attacks.

One very potent exciting cause of attacks is mental overwork or anxiety; another generally recognized is that condition of the system in which oxalate of lime appears abundantly and frequently in the urine, and in which uric acid quickly separates from it—in brief, acidity, or a gouty disposition. Indigestion may also be an exciting cause.

Guided by the above pathological and ætiological notions, I have treated migraine by—

1. Treating the patient, and removing all exciting causes.
2. Treating the attacks themselves.
3. Treating the disease, or the supposed fundamental pathological state in the nervous system.

First.—The treatment of the patient consists in removing all relievable exciting causes, and more especially in correcting acidity. For this purpose I employ the ordinary means, viz., giving nitro-muriatic acid and alkalies, and greatly reducing the saccharine and amylaceous foods of the patient. In cases attended by debility, anæmia, and imperfect nutrition, it may be necessary to resort to tonics, including cod-liver oil.

Second.—Treatment of the attack. The first thing to be done, in my opinion, is to place

the patient under circumstances which secure quiet and semi-darkness. The attempt to "fight out" a sick-headache is nearly always vain, and may be injurious. It is better not to allow the patient any food, not even liquids, until toward the close of the attack, or even not till next day; by this, nothing is lost, and much wretchedness is avoided. Ice, or ice washed in brandy, is grateful.

If the patient have a warning aura of migraine before nausea or pain, much can, I believe, be done to cut short the attack or diminish its severity by the use of guarana, caffeine, or croton chloral hydrate. In my hands, guarana, or the powder of the seeds of *paullinia sorbilis*, has proved very efficacious. I have prescribed the fluid extract of guarana, Caswell & Hazard's Elixir of Paullinia, the French Paullinia powders, and powdered guarana prepared by our druggists, and all of these preparations have in my hands often cut short or prevented attacks, if given in the early stage of the disorder.

Of the elixir or fluid extract I give a teaspoonful, to be repeated twice, at an interval of an hour. The powders are administered in twenty or thirty grain doses, also repeated every half hour or hour. I think that I may report that nearly one-half of my patients have derived great relief from some preparation of guarana, and that in several of them attacks have been absolutely prevented, and they have been enabled to go about on the same day.

Caffeine, in doses of two grains, repeated every hour, until three or four doses have been taken, I have lately employed, upon the recommendation of my friend Dr. Geo. M. Beard, and it has appeared to do good.

Croton chloral hydrate, recently recommended in all neuralgic affections of the head and face, I have recently prescribed in doses of 15 and 20 grains, repeated every hour until four doses are taken or relief obtained. This remedy is to be used more especially in cases where pain is the first symptom, and in other cases if seen when the pain is fully established.

I have no personal experience with the use of large doses of bromide of potassium and of alcoholic stimulants, for the relief of attacks.

Hypodermic injections of morphia and atropia (gr.  $\frac{1}{4}$  to  $\frac{1}{2}$ , and gr.  $\frac{60}{100}$ ) have permanently relieved attacks in a few of my cases; but I am very reluctant to employ this means, so fraught with the danger of the formation of the opium habit. I never allow my patients to take opium or morphia themselves in this disease.

I would add that there is very probably a real ultimate usefulness in shortening or preventing every attack which may threaten to occur during the systematic treatment of the neurosis; we may thus be doing a good deal to interrupt the *morbid habit* which the nervous centres have acquired.

Third.—Treatment of the disease. No treatment of this sort had been tried, to my knowledge, before Dr. Greene made his remarkable researches upon the effect of *cannabis indica*. Dr. Greene reported cases of many years' standing as having been months and years without attacks while and after taking *cannabis indica*, and in other extremely bad cases marked reduction in the frequency and severity of the attacks was obtained.

I have said, in the opening page of this small contribution, that I and a few medical friends have used the *cannabis* treatment ever since Dr. Greene's publication, and with satisfactory results.

The principle of the treatment is to keep the nervous system steadily under a slight influence of *cannabis* for a long period of time; in other words, we are to employ the "continued dose" of the remedy, as Clarke and Amory say, in speaking of the use of bromide of potassium in epilepsy.

I give to adult females one-third of a grain of the alcoholic extract of *cannabis indica* before each meal, increasing the dose after a few weeks to one-half grain. Males can generally begin with one-half grain, and it is well to give them three-quarters grain in two or three weeks. These doses must be taken with the greatest regularity, just as faithfully and regularly as bromides in epilepsy. Indeed, when beginning such treatment, I usually obtain a promise from the patient that he will regularly take the pills for a period of three months.

As a rule, no appreciable immediate effect is produced by the above doses, though I have known lightness of the head and slight confusion of mind to result from an initial dose of one-half grain three times a day.

Under this apparently and essentially simple plan of treatment, I have known what may be termed excellent results to be obtained. Of course, I do not mean to say that all my patients have been benefited, but, without a statistical table, so difficult to construct from the experience of private practice, I feel certain that about one-half of my cases have been relieved. A few—two or three—after being more than a year without return of their migraine, have passed from under immediate observation. One of these now very rarely has headache, although for several years he has taken no medicine. The majority of patients relieved have obtained months of freedom from attacks while taking the remedy.

I think that we may say of *cannabis* for migraine that it is nearly as efficacious as the bromides in epilepsy. Both may cure, both do bring about remarkable interruptions in the series of attacks, both must be employed in the shape of the continued dose.

*Cannabis* in migraine is less effectual than the bromides in epilepsy, but, on the other



hand, it is superior to them in not producing unpleasant or injurious effects.

My friends and former partners, Drs. William H. Draper and Frank P. Kinnicutt, have used the above plan of treatment frequently in the last five years, and their results substantially agree with my own.

Some surprise naturally arises upon seeing so much good done by small doses of a neurodic medicine in a disease so deeply rooted as migraine. Our wonder may never cease respecting the *modus agendi* of the drug—its essential potent action; but its gross and practically interesting effect is very analogous to a well-established acquisition of empirical therapeutics. I refer to the successful employment of belladonna or atropia in epilepsy. This treatment, especially vaunted by Trousseau, is by no means useless, although it is no longer fashionable since the more useful bromide treatment has come into general use. I still, however, employ belladonna in epilepsy in conjunction with the bromides, and this combination sometimes brings about gratifying results.

I may be allowed to briefly mention one illustrative case. When Dr. Brown-Séquard went to Europe in 1875 one of his patients came under my care. She had a bad form of epilepsy, and in spite of the most skilful use of the bromides by her illustrious physician she had been having a fit every two weeks for months. I made little change in the amount of bromides she was taking, merely substituting my own simpler solution for Brown-Séquard's mixture, and gave her one-quarter grain of belladonna three times a day—just enough to keep her throat a little dry. From the very beginning of treatment the epileptic attacks became fewer; intervals of one, three, and fourteen months being obtained. In the present year, owing to the uncontrollable cause of the epilepsy, she has had three or four seizures.

A close parallel may, I think, be drawn between the two diseases, epilepsy and migraine; and between the two remedies, belladonna and cannabis; thus, in my opinion, logically fortifying the proposition advanced upon empirical grounds, that cannabis is useful in the treatment of migraine.

1. Migraine and epilepsy are both nervous affections characterized by the occurrence of periodical attacks; the attacks themselves in both diseases are largely made up of vaso-motor disturbances: in both it is probable that the medulla oblongata is primarily or secondarily diseased: both affections occur in the same families, and may be present at successive times in the same patient. The late Dr. Anstie has expressed the opinion that the two diseases are akin, and states\* that migraine may develop into genuine epilepsy. I have in my private case-books cases illustrating this proposition, and I am now

treating a physician who states that after nocturnal epilepsy appeared, before beginning bromide treatment, his old migraine grew less frequent and less severe.

2. As regards the two remedies, cannabis and belladonna: both are intoxicants and deliriants; both dilate the pupil, and it is probable that the action of both upon the central nervous system, when administered in the shape of the continued dose, is very similar.

In conclusion, I would earnestly ask the gentlemen who have honored me with their attention this evening, to give the cannabis treatment of true migraine a critical trial.

#### USE OF THE COLD DOUCHE, AND FRICTION WITH TOWELS WRUNG OUT OF COLD WATER, IN CASES OF CHRONIC PHTHISIS.

Dr. A. Von Sokolowski is Dr. Brehmer's assistant at the Görbersdorf (Silesian) Sanatorium, where a very great number of phthisical patients are treated every year. He remarks (*Berliner Klinische Wochenschrift*, Nos. 39, etc. 1876) that a variety of opinions prevail amongst medical men as to the propriety and usefulness of the cold douche in pulmonary phthisis. Some consider it of the highest utility; others regard it as quite unfit not only for consumptive cases, but for all analogous ones. It occurred to him, therefore, that it would be useful to carefully note the effect of this treatment in the cases under his observation at Görbersdorf. The results are as follows. A hundred and five cases of consumption were treated by the cold douche. These may be subdivided into three categories. 1. Patients with deposits of very limited extent (infiltration) in one or both apices of the lung, and patients only suffering from catarrh of the apices, with marked hereditary taint. These deposits were partly recent, partly of old date; sixty-six patients belonged to this category. 2. Patients with extensive infiltration, without any demonstrable breaking down (destruction) of tissues, and whose general condition was good; nineteen patients belonged to this class. 3. There were thirty-three patients who had physical signs of breaking down, or softening of the deposits (destruction of lung-tissue) yet with the general health little impaired. This class includes both limited and extensive deposits. Of the whole number, sixty-six had no hereditary history of phthisis, whilst in thirty-nine cases the history of phthisis in the family was perfectly clear and indubitable. The hydrotherapeutic treatment was supplemented by attention to diet, and an air-cure. The duration of the hydrotherapeutic treatment was on an average about three months.

The final results of the treatment were as follows. Of the hundred and five patients (1) thirty-nine left the institution with so much

\* The Practitioner, Vol. IX., 1872, p. 356.

improvement that they might be considered as perfectly, or at least for all practical purposes, cured; (2) thirty-four left it with very considerable improvement; (3) nineteen with some improvement; (4) seven left it with no improvement; (5) two of them were worse rather than better; and (6) four of them died. We thus see that thirty-nine of the hundred and five cases, or 37 per cent., terminated in recovery. Those which recovered perfectly were for the most part cases of the limited deposits in the lung. In such cases, after the treatment, there was considerable improvement of the general condition, gain of weight and strength, with increased appetite, and perfect absence of all pathological symptoms as regards the organs of respiration, though one or two may have shown slight variations from normal percussion-tones, and prolonged expiration at the apex of a lung; but this slight dulness at the apex is sometimes consistent with recovery, as it may be due to thickening of the pleura. It is not pretended that there is absolute freedom from relapses under other conditions of climate and modes of life. Years are required to settle this point affirmatively. In the second class, or those relatively cured, must be placed those cases in which there had been considerable destruction of lung-tissue, with subsequent contraction, etc. Their general health was improved; all hectic symptoms, where such were present, had disappeared; but the damaged lung remained as a sort of *caput mortuum* to the injury of the organism. Such cases must of necessity be very liable to relapse. If the 37 per cent. seem a large proportion of success, it is to be remembered that the cases subjected to this douche treatment were selected from those suffering from the most favourable forms of the disease. Only 25 to 30 per cent. of the Gôrbersdorf patients were subjected to the douche. Only eleven of the cured cases had hereditary phthisis. Of the four fatal cases, one died of typhlitis and general peritonitis, of a purulent kind; one, after hæmoptysis, died of tubercular meningitis; a third, after hæmoptysis, died of acute and rapid phthisis; as did the fourth and remaining case.

As regards the immediate effects of the douches, and those of the combined or repeated douches, they are as follows: 1. The capillary vessels of the skin become accustomed to a sudden contraction (shown by pallor, cold feeling, and emptiness) and then become dilated for a longer time (shown by purple red colour, and a pleasant feeling of warmth). 2. There is an increase of cutaneous respiration. 3. There is increased tissue metamorphosis, and improvement of the general condition of the patients. The skin is too often neglected in consumptive patients, and at first the douche often proves very unpleasant. The reaction is promoted by vigorous rubbing with

towels, and very soon the skin begins to resume its functions, and the douche is no longer unpleasant.

Sokolowski considers the douche indicated—I. In those predisposed to phthisis, but not actually consumptive, as (1) children of phthisical parents, whilst growing up; (2) people who have very sensitive skin and mucous membranes, and are always taking cold; (3) in so-called "primary catarrh of the apices;" (4) in chronic bronchial catarrh, not definitely localized with history of consumption in the family; (5) in chlorosis of constitutional or hereditary type. II. In people already suffering from phthisis; (1) in all the acquired inflammatory kinds, if the general condition of the system be good; as (a) in limited deposits in one or both apices of lungs; (b) in more extensive lung-changes, i. e., when the size of the deposit is larger, even with considerable breaking down of tissues in consequence of chronic, stationary phthisis, without pyrexia [in a note he says that slight evening exacerbations of temperature do not forbid the use of the douche; and he refers to a paper of his in the *Deutsche Zeitschrift für Praktische Medizin*, No. 46, 1875]; (2) in constitutional inherited phthisis when the lung symptoms are still limited and slight, and the general health is good. But improvement should already have set in under the use of appropriate diet and fresh air. In summer the douche may be used freely. In winter we must be far more cautious. Pharyngo-laryngeal catarrh is a decided contra-indication against the use of the douche in winter. Not only the time of year, but the weather of each day must be taken into account. The chief contra-indications are: 1. Great general debility, apart from lung symptoms; very anæmic people mostly belong to this class; 2. Well-defined hectic symptoms, even when not very severe; 3. When no improvement results from the use of the douche, or there is faulty reaction, a great feeling of weariness, long-continued chilliness, faintness, etc., produced by its use. As temporary reasons forbidding its use are: 1. The menstrual period; 2. Severe nasal catarrh, especially in winter; 3. Hæmoptysis; 4. Well-marked muscular rheumatism, and other complications or incidental maladies. Whether a tendency to hæmoptysis forbids the douche is much disputed. Sokolowski thinks the objection theoretical. The experience of these hundred and five cases is against it; 70 per cent. of them had more or less hæmoptysis; 27 per cent. rather considerable losses of blood. In the eight months of douches there were only nine slight, and four severe attacks of hemorrhage—only once immediately after the douche—thus, in only fourteen of the seventy-four was there any bleeding from the lungs during the treatment. Indeed, slight hæmoptysis was several times

checked by the douches—once in his own person, for Dr. Sokolowski was himself a patient at Gorborsdorf in 1873 and 1874, and made use of the douche. He remarks that both the profession and the public attach an undue importance to slight bleeding from the lungs. He has known a patient to lose ten pounds in weight in two or three days after a trifling loss of blood. Others became melancholic or mad. Others again fainted at the sight of a drop or so of blood. Only special forms are dangerous, such as the aneurismal, etc. The moral treatment is of vast importance in all cases. The cold douche will actually check some cases. Many hemorrhages from the lungs occur in the early morning with subnormal temperatures, and slow, small pulse. This *pulsus rarus et parvus* (sixty in his own case) is often the precursor of bleeding; doubtless due to congestion of lungs and weakness of heart. He has known a glass of wine and a walk check some hemorrhage. As to the kind of douche, he agrees with Brauu, in his *Balneotherapie*, (Berlin, 3te Auflage, 1873, p. 249), that few things require more skilful control than the douche, and few are so dangerous as this in the hands of an enthusiast. The natural temperature of the water from the hills, used at Gorborsdorf, is from  $\text{ö} + 4^{\circ}$  to  $+ 10^{\circ}$  Réaumur ( $41^{\circ}$  to  $54^{\circ}$  Fahrenheit), and this is used without modifying it for special cases. There is high natural pressure, owing to the height of the sources. Two kinds of douche are used, (a) the rose, or rain-douche, which spreads over the whole body, by falling like a shower from above; and (b) the jet-douche, which is either perpendicular or lateral. There is a special chamber. The medical attendant, on hearing the patient's name, turns on the appropriate tap. It is generally applied between 8 and 10 A.M., and at first only from four or five seconds. After the douche, the patient is rubbed vigorously, and then, if the weather permit, walks out, and climbs the hills; or, in bad weather, takes exercise in a long saloon for the purpose. Hardly any douche exceeds thirty seconds. The first, and sometimes other douches are followed in some cases by dyspnoea, or by violent palpitation. These symptoms sometimes depend on the time being too protracted. If they persist, along with weariness and general weakness, it is better to leave off the douches. Headache may be sometimes avoided by protecting the head. Stabbing pains, with violent cough and expectoration, are met with in a few cases. Brisk rubbing with a towel dipped in rather cold water ( $50^{\circ}$  to  $59^{\circ}$  F.) may be substituted for the douche with great advantage, particularly in the winter. Rubbing with a dry towel succeeds this. The whole affair must not exceed five minutes. Hectic is considered to contraindicate both these and the douche. The same remarks generally applies to night-sweats.

## PARENCHYMATOUS INJECTION OF ERGOTINE.

Dr. L. Collins, of Guilford, Ind., in *The Clinic*, speaks favorably of injecting a solution of ergotone into the tissue of the cervix in cases of subinvolution of the uterus and chronic engorgement of the neck of the organ. He uses a needle about four and a half inches long, attached to a hypodermic syringe; operates through a common glass speculum, first producing local anæsthesia by placing a pledget of cotton, saturated with chloroform, against the os, and throws into the cervical tissue a solution containing two or two and a half grains of Squibb's ergotone. The injections were repeated every six days. Very little local irritation is said to follow—and the pain, if any exists, soon assumes an intermittent character.

## DISEASES OF THE NERVOUS SYSTEM.

*A Lecture Delivered at Bellevue Hospital Medical College,*

By C. E. BROWN-SÉQUARD, M.D.

Effect produced when brain disease strikes at the origin of nerves—Diagnosis of hemiplegia—Distinction between disease of one-half of the spinal cord and disease at the base of the brain—New symptom—Effect upon temperature, etc.—Zone of anæsthesia—Disturbances of other organs; kidneys, heart, lungs, etc.—Absence of convulsions in disease of the pons varolii—Diagnosis of disease of the crus cerebellum—Paralysis a constant symptom of brain disease.

(Reported for *The N. Y. Medical Record*.)

Gentlemen:—At the last lecture I referred to a number of cases, with the purpose of showing that any lesion in the side of the brain can produce the greatest variety of forms of paralysis—the greatest variety as regards the extent, the degree, and the persistence of paralysis. This, of course, has led a number of you to think it to be extremely difficult to make a diagnosis of the locality in the brain of the disease which produces paralysis. No doubt, it is extremely difficult, but as you will see, from what I shall say to-day, there are features which can lead to diagnosis of locality of lesion, even when what we observe is entirely in opposition to the views which are generally accepted.

But before I speak to you of those facts which lead to diagnosis of the seat of the disease that has produced the paralysis—the symptoms of the disease—I have a few words more to say upon a point which escaped notice in the previous lectures. It is this; the theory published by Dr. Broadbent has been put forth with the view of explaining certain difficulties which we find as regards the seat of paralysis. As I told

you yesterday, in most cases of brain disease producing hemiplegia, the hemiplegia consists almost exclusively of paralysis limited to the arm, the leg, and to some of the muscles of the face. There are many parts of the body which escape paralysis in the immense majority of cases of disease of the brain. These parts are the muscles of the trunk, the muscles of the neck, those muscles which go from the trunk to the limbs—the arms or the legs. Those muscles escape paralysis more or less, rather more than less, in the immense majority of cases. Dr. Broadbent has tried to explain this fact in admitting that there are certain parts of our body which depend on a centre located in the medulla oblongata or at the lower part of the pons varolii, and which has the power to act upon both sides of the body. So, admitting that one side of the brain is destroyed totally, including that nerve centre—centre which is the corpus restiformis upon the same side, the corpus restiformis upon the other side is alone sufficient to move the two sides of the body, and thereby the muscles which have escaped paralysis. The view is certainly true in a great measure, but it is faulty in this: Dr. Broadbent, as well as most medical men, considers the corpus restiformis as a motor-centre. The reality is, as I hope to be able to demonstrate, that a small part of one side of the brain is sufficient for both sides of the body, not only for the muscles which escape paralysis but for the muscles of the limbs as well.

I now pass from this to what I have to say regarding the significance of certain symptoms in the diagnosis of the seat of the brain disease which causes paralysis. There is one fact, very important indeed for you to understand fully before I enter into details upon this point. As you well know, there are nerves arising from the base of the brain, nerves which serve as centres, which serve for general tactile sensibility, and also as nerves of motion. Then you must make a distinction between cases of paralysis of those nerves dependent upon disease which strikes at the very place from which those nerves arise, in which case the trunks of the nerve itself or its immediate roots within the base of the brain are implicated, and those cases in which these nerves are paralyzed when the lesion is beyond the place of their entrance into the base of the brain.

Suppose, for instance, a lesion occurs in the medulla oblongata in the immediate region where the root of a motor-nerve has its origin; if the disease strikes there, it of course destroys some of the fibres of the nerve, and it destroys the cells also from which the nerve-fibres arise. But let the disease be located in another part of the brain—at a point beyond—where there are no nerve-fibres arising which form a connection with the nerve which goes down from the medulla oblongata, then you will have a result completely different from what you have when

the cell itself of the motor-root is struck by the disease. In those cases of paralysis of nerves in the base of the brain dependent upon destruction of the cell which gives rise to the nerve-fibre, or striking the root itself before it reaches these cells, you have just the same result produced as if the nerve-trunk had been affected outside of the brain.

Something quite different takes place when the disease is beyond the origin of these nerve-fibres. In what I have already said in a previous lecture with reference to paralysis of the muscles of the face, muscles of the eye, paralysis in the tongue, in the neck, and elsewhere, I had in view only those cases in which the paralysis depended upon disease inside of that zone or layer of nerve-cells which gave rise to the motor nerve-fibres going to the tongue, to the eye, etc. There is no question that, when you find disease in the base of the brain striking the nerve or its roots before they reach the cells of origin, there will be paralysis upon the same side of the body in which the disease is situated. It is quite evident that it must be so. You have a cause acting the same as if you had divided the nerve itself outside of the brain, and of course you have paralysis of the nerve.

In what I have now to say, you will find that what I have just mentioned is of the greatest importance; I will illustrate at once the meaning of this. You will see that in case of disease of the pons varolii, for instance, a little above the place of origin of the facial nerve—the nerve which acts upon the muscles which give expression to the face—there is a characteristic condition produced.

If the disease is upon the roots of the facial nerve, or upon the cells which give origin to these fibres of the facial nerve, the muscles of the face upon the same side of the seat of the disease will be affected. If the disease is elsewhere as a rule, the muscles of the face upon the side opposite to the seat of disease will be affected. So you see that in disease in the same organ, the pons varolii, you may have results just the reverse of each other. The face may be paralyzed upon the right or upon the left side; but as regards the limbs, as a rule, you will find them paralyzed upon the side opposite to the seat of the lesion. What I wish you now to fully appreciate is the fact that, when the disease strikes at the origin of the nerves, necessarily it produces paralysis in the nerve; that nerve may be the olfactory, the optic, or any one of the cranial nerves. In any of these cases the very same thing will occur with regard to the seat of the paralysis; it will always be upon the same side with the lesion.

#### DIAGNOSIS OF HEMIPLEGIA.

I come now to the diagnosis of various cases of hemiplegia. I must first point out the fact that disease of one-half of the spinal cord, as

well as disease at the base of the brain, can produce hemiplegia, and how you are to determine where the seat of the disease is, is what I will try to explain. You may find two persons struck down suddenly with loss of consciousness, some times with convulsions—convulsions are not essential, however—and after there is recovery from the shock, you find that there is paralysis, in both cases, on one side of the body. We will suppose that the right side is paralyzed. One of these persons makes grimaces upon the side of the face corresponding with the side on which there is paralysis of the extremities; so you may be inclined to think that there is paralysis of the face upon the opposite side.

#### NEW POINT IN DIAGNOSIS.

This point in diagnosis, so far as I know, has not been mentioned except by myself, and as it is a constant phenomenon in certain kinds of lesion of the spinal cord, I wish you to be quite aware that in that case there is merely an appearance of paralysis upon the side of the face opposite to that on which there is paralysis of the limb. If you pay attention only to the appearance of paralysis of the left side of the face and on the right side of the body, and establish the fact that the man has had an attack of apoplexy, loss of consciousness, etc., you will certainly, and quite naturally, according to the teachings of science until now, be led to admit that there has been somewhere in the brain a lesion which has produced all these symptoms. That may be a mistake, or it may be correct; because lesion in one-half of the spinal cord near the medulla oblongata can produce all these symptoms. I will say at once that when you examine the face, you will find that the side which seems to be paralyzed is not the paralyzed side. You will find that there is no paralysis of the face upon either side in that case. You will find that the appearance of paralysis comes only from the fact that, on the side of the lesion in the spinal cord, there is simply a spasmodic state of certain muscles of the face.

In case of spinal hemiplegia, paralysis of one side of the body, depending upon disease high up, and limited to one-half of the spinal cord, you will find that there is a series of symptoms such as I mentioned a moment ago. You will find features which certainly will distinguish these cases from cases of hemiplegia, depending upon disease of the brain. If you examine the patient carefully, you find that there is paralysis, and, as I have supposed the lesion to be in the right half of the cord, the patient is paralyzed in the right limbs; but there is no diminution of sensibility. On the contrary, there is considerable increase of sensibility, as measured by the esthesiometer. The hyperæsthesia may be extremely great. Indeed, in the case of one of my dear friends, Mr. Charles Sumner, at the

two points in the spine which had been injured by a cane in an assault made upon him in the Senate Chamber, both points of the instrument could be distinctly recognized, no matter how near to each other they were placed.

That kind of feeling—that of touch—may be increased considerably in many other cases; but in spinal hemiplegia the tactile sensibility is increased in the paralyzed limits to a considerable extent.

Other kinds of feeling are also increased. Painful feeling is often considerably increased, and sometimes it is so great that a mere touch produces a scream. There is also an increase in the power of detecting differences of temperature. There is lack of power of enduring the contact of anything very cold, or very hot, as those things will produce decided pain. There is besides an increased sensitiveness to tickling. But there is another feature which will assist in making a diagnosis between this form of paralysis and that form dependent upon disease in the base of the brain, and that is the condition of the muscular sense. When the patient has but little power of motion the muscular sense is very good indeed, and he will know perfectly well where his limb is without the necessity of placing the hand upon it to determine its location.

Now, in the contrasting condition, there is loss of sensibility of all kinds. The loss may be absolutely complete, so that the patient is not able to feel any blow, prick, tickling, galvanism, etc.

As regards the temperature in the limbs there is another distinguishing feature. You will find that the limbs are very much warmer where the muscles are paralyzed, and lessened in warmth upon the opposite side. There is then a double effect upon the temperature; increase upon the side of the lesion, and diminution upon the opposite side. But these are not the most interesting features of such cases. You will find that the face is warmer upon the side of the lesion, and that is because the fibres of the sympathetic nerves going to the blood-vessels of the head are divided upon that side of the spinal cord. There is higher temperature in the face, higher sensibility, and greater redness of the eye and ear. There is also a symptom to be observed in the eye; and that is dilatation of the pupil upon the side of the lesion. These are effects which we know will follow galvanizing the sympathetic in the neck. All these effects are found in connection with disease of one-half of the spinal cord.

The fact that the muscles are contracted is in consequence of the greater afflux of blood to the part; it is not due to changes occurring in the nerve centres, but to the local fact of being fed far more abundantly than in health. Hence they are in a state of greater tonicity, as it were; but there is no trace of paralysis on



either side of the face. That fact will serve as a diagnostic feature between the form of hemiplegia depending upon disease of one-half of the spinal cord, and hemiplegia depending upon disease in the base of the brain. Besides there are a great many symptoms of disease in the base of the brain which do not exist with disease affecting one-half of the spinal cord.

I now pass to other facts. In cases of disease of one-half of the spinal cord, you will find that there is usually a feeling of stricture about one-half of the body at a level with the seat of the cord.

#### ZONE OF ANÆSTHESIA.

At that place there is something that can be recognized which is very interesting indeed, and which is in harmony with the view regarding the origin of nerve-fibres. As the lesion in the spinal cord necessarily destroys some nerve-fibres which do not supply the motor-trunk, there is a zone of paralysis of sensibility at the level of the injury in the cord. Some of the sensory roots have been involved; hence the loss of sensibility in that circumscribed region. We have hyperæsthesia below and above the seat of the lesion, and a small zone of anæsthesia at the place where the lesion occurs, so that the body is separated into *three zones*—*two of hyperæsthesia, and one of anæsthesia*. Nothing of this kind is present in hemiplegia depending upon disease in the base of the brain. You can already see that diagnosis can be easily established, and you will see this much more clearly as I come to speak of the symptoms of hemiplegia depending either upon disease of the medulla oblongata, or other parts of the brain.

#### GENERAL SYMPTOMS.

When there is disease in the medulla oblongata, or pons varolii, there are general symptoms which are of great interest, not so much for diagnosis, as for prognosis. They are important in deciding upon the chances for restoration to health, and the chances of death; and also the means of treatment are not the same as when the disease exists in other parts of the brain. These general features are that, according to the seat of the disease in the base of the brain, there are nerves implicated which show where the disease exists. Supposing it to be in almost the entire length of the base of the brain, from the origin of the optic bands down to the spinal cord, you will find that all the nerves which take their origin in that part are more or less implicated in the disease. If you know what these nerves are, you can easily understand what the symptoms will be. I will simply mention that as the *third* pair of nerves is implicated, certain results will be manifest in the eye, and you will find the pupil affected, and the motion of the eye will be affected. Other

nerves are implicated, and the effects are exceedingly complex, but they are in perfect harmony with the known functions of the nerves having their origin at the base of the brain. So the diagnosis may be perfectly clear, and you will find, as a rule, that the paralysis, instead of being upon the same side, as in the case of disease of one-half of the spinal cord, is upon the opposite side of the body. If there is loss of feeling, it is where loss of movement exists.

#### DISORDERS IN THE KIDNEYS, LUNGS, AND HEART, ETC.

But there are other features: there are disorders which take place in many of the organs of the body. The urinary secretion is disturbed; sometimes increased immensely, with or without the presence of sugar. When sugar is present, the quantity of urine is not so much increased as when the sugar is absent; but it may be considerably increased in quantity. We may have then both forms of diabetes—insipidus and mellitus. These two forms of diabetes are found in connection with all diseases in the base of the brain, but they may exist in connection with disease very far from the brain. To my knowledge, these forms of diabetes never exist when the spinal cord is the seat of disease.

There are many other features. I have shown that lesions of the pons varolii, or medulla oblongata, affect the lungs almost at once. That is the fact in most cases in which the lesion is made in animals. I may say that it is frequently so in man. One of the chief effects produced by lesion in the pons varolii in man is considerable congestion of the lungs. Another effect, which depends almost only upon lesion in the pons varolii where the *crus cerebri* comes into it, is hemorrhage into the lungs. This occurs very frequently indeed; sometimes it is slight, and sometimes enough to destroy life rapidly. It was known that hemorrhage into the lungs occurred in connection with hemorrhage into the base of the brain, but it had been supposed that it took place because of the same alteration in the walls of the blood-vessels in the lungs as was present in the blood-vessels in the brain. My friend Professor Charcot and Bouilland made the great discovery that hemorrhage in the brain depended almost always upon the rupture of small aneurisms—miliary aneurisms. It was imagined, and it has been found to be the case, that the blood-vessels in the lungs also have the same kind of aneurismal dilatations, and it was thought that in those cases in which hemorrhage, either small or large, took place in the lungs, after having hemorrhage into the brain, it was dependent upon the same cause. Without doubt it is so in some cases, but, as a rule, when the hemorrhage in the lungs appears very quickly after that which occurs in the brain it is produced in

a direct manner by an alteration in the circulation in the lungs.

I have asserted that the breaking of blood-vessels in the lungs depends upon this change. The arteries and veins become so contracted that there is not a trace of blood in them, and then the congestion goes so far that a capillary breaks, and there is hemorrhage. It is one of the causes of death in disease of the pons varolii, or perhaps at other parts of the base of the brain.

This cause of death has not been sufficiently guarded against, and it very frequently happens that no examination of the chest is made in these cases. This is a fault which I myself have fallen into, but it should always be kept in mind that great alteration can take place in the lungs in consequence of disease in the base of the brain.

The opposite may occur, perhaps, in one out of ten cases.

We have, then, *first*, congestion of the lungs, and, after a time, there may occur, foci of inflammation in connection with acute disease in the base of the brain. As the patient has more or less difficulty of breathing, on account of the brain disease itself, the disease of the lungs passes unnoticed, and no local treatment is applied which could be of great service to the patient. I have no doubt that we may recall to memory a great many cases published as fatal cases of disease, occurring at the base of the brain, which terminated fatally, not because of the brain disease itself, but because of subsequent disease of the lungs, which passed unnoticed during life.

There is, therefore, in cases of disease of the brain, an effect, which is of great importance, produced upon the lungs. Another effect which is of great interest can take place. As you well know, the par vagum takes its origin in the medulla oblongata. And you know that if this nerve is galvanized, the heart's action is arrested. Well, acute disease in the medulla oblongata, or close to it in the pons varolii, will produce irritation of the par vagum, and may reduce the heart's action to such an extent as to prove fatal. You doubtless know that there are a number of cases upon record in which death was caused by pressure upon the medulla oblongata, from displacement of bones, or some other cause. There is this feature, then, in connection with disease in that region: that is, there is a diminution in the beat of the heart—a diminution in force rather than a diminution in speed.

There are other features belonging to lesion in those parts. As you well know, the œsophagus, the pharynx, and the larynx are supplied with nerves which arise from this region. There may be spasm in these organs. In a case which I shall always remember, for it occurred in the person of a most dear friend of mine,

there was such spasm in the œsophagus that it was absolutely impossible to feed him by the mouth; not even a tube could be passed through the œsophagus, so great was the spasm, and we were obliged to sustain his life by nutritious injections into the bowels. The material used was the fresh pancreas of an animal, with hashed meat. The fat is removed from a fresh pancreas, and the influence of the remaining portion upon nutrition is pretty nearly the same as if a series of meals were taken in the usual manner. In the case of my poor friend, life was maintained eight days solely by this process of eating.

There is, therefore, an effect produced upon these parts by disease situated at the base of the brain, as mentioned. There are other features of interest. You may diagnose very easily, for instance, whether there is disease present upon the origin of the trigeminus nerve by change in the state of the cornea. The cornea becomes somewhat inflamed and after a time the eye may be destroyed. You already know that Magendie has long ago shown that when the trigeminus is divided in an animal there will follow impairment of nutrition in the eye, and after a time the organ will be lost. Magendie also has shown that all the senses are affected by division of the trigeminus—the sense of sight, of audition, of olfaction, as well as the sense of taste. This conclusion of Magendie would not have been drawn had he been familiar with the phenomenon of the loss of function. When the trigeminus is diseased or divided, the nerve-fibres produce no action, and that result is quite sufficient to produce loss of sensation, and the nutrition of other organs of sense is disturbed by such result.

A blow upon the frontal nerve, for instance, may be sufficient to cause loss of sight, and, besides, a considerable alteration in the nutrition of the eye. Irritation produces loss of all the senses, and in that case it may be from reflex action affecting the blood-vessels, thus changing the nutrition. Disease of the optic thalamus, for instance—a part far away from the origin of the trigeminus—can produce by its effect, through the trigeminus, an alteration of sensation, and an alteration of nutrition in the cornea and loss of the eye, the same as if the trigeminus itself was diseased or divided. Therefore, when you find loss of nutrition upon either side of the face, and alteration of sensation upon that side, you can judge that the cause or lesion is upon the side where the trigeminus is disturbed.

Now comes something in the way of diagnosis that is of the greatest importance. In a case I found these symptoms associated with paralysis of the limbs upon the same side. I concluded, therefore, that the lesion was upon the pons varolii in the origin of the trigeminus, and I concluded so from the fact that there were

present the changes in nutrition and sensation which I have just described. The patient died subsequently, and Dr. Edes, of Baltimore, found the lesion at the exact point at which it was thought to be situated. There was no special maturity in making the diagnosis, but I mention the fact simply to show that you may find disease upon one-half of the pons varolii producing upon the same side paralysis of motion and changes affecting the sensation and nutrition of the eye, upon the same side. But disease at the same point can produce just the reverse, and we may have paralysis upon the opposite side, anæsthesia upon the opposite side, and rigidity of the muscles. So you may have paralysis upon the same side with the lesion, or paralysis upon the opposite side. I will add that you may have motion lessened in that part, with clear symptoms belonging to the trigeminus, without paralysis in the trunk or in the limbs. There is in this last case, perhaps, some difficulty in the diagnosis. You may think that the trigeminus alone is affected, but it is not necessarily so; for a great part of the pons varolii may be destroyed without producing paralysis, except in the nerves which arise from that region of the brain. Those nerves have been most affected, but in some cases, one especially published by Stanley, a tumor had destroyed one-half of the pons varolii, and there was only incomplete paralysis upon the corresponding side.

The diagnosis in that case would have been clear, from the fact that the trigeminus was affected completely, and the eye was destroyed. There was also present a symptom which is not rare in connection with irritation of the trigeminus, and that is paralysis of the face. There is, therefore, no great difficulty in diagnosis of disease affecting these parts. Another feature you will find very frequently in these cases of disease at the base of the brain. You will find that there is, instead of paralysis of the limbs, anæsthesia or a great deal of hyperæsthesia.

#### ABSENCE OF CONVULSIONS IN DISEASE OF THE PONS VAROLII.

You will also find that there is a remarkable absence of symptoms. The pons varolii has been considered as a part perfectly able to produce convulsions. It is so in animals, and convulsions are readily produced by irritating that part of the brain; but it is not so in man. Disease there produces convulsions less frequently than disease elsewhere in the brain. So if you find that convulsions are not present, and there are symptoms showing that the nerves arising from this part of the brain are affected, you will almost certainly be led to admit that there is disease at that point. There is a part close to the pons varolii which may give rise to most

interesting features, and indeed it is not rare that disease in the pons varolii produces some of these symptoms. It is that part which is close to the edge and unites the pons varolii with the cerebellum, the crus cerebellum. When this part is irritated, a rotary movement of the body is produced. It is not special to irritation of that part, however, but irritation of the crus cerebellum and other parts of the brain may produce the same kind of movement.

#### DIAGNOSIS OF DISEASE OF THE CRUS CEREBELLUM.

Diagnosis of disease of the crus cerebellum alone is usually very easy. Hemiplegia depending upon disease of the crus cerebellum may appear upon the same side or upon the opposite side of the body. As a rule, it appears upon the opposite side. But there are two cases out of the entire number, which is not large, of disease of the crus cerebellum, in which paralysis was present upon the same side. The crus cerebellum has been considered as the point of union of those parts of the brain which produce voluntary movements with those parts which produce sensation. So you see that in case of disease of one crus cerebellum you should have always complete paralysis of movement, and complete anæsthesia upon the opposite side of the body. This is absolutely false. Out of some thirteen cases of this kind upon record, complete paralysis is not at all frequent, and cases of complete anæsthesia are very rare—indeed, I know of only two such cases. The facts, then, are not in harmony with the theory that the crus cerebellum is a part containing all the motor and sensitive fibres going to the opposite side of the body. So little is that true that there are cases in which destruction of the crus cerebellum has occurred without paralysis at all. Certainly, there are ten cases on record in which the entire mass of the crus cerebellum has been destroyed without producing paralysis upon the opposite side, and without producing anæsthesia. I have said that paralysis in some of these cases *seemed* not to exist at all, but it is quite an essential matter that, in the future, more reliable means are employed to ascertain whether paralysis is present or not, than those which are usually employed.

#### PARALYSIS A CONSTANT SYMPTOM OF BRAIN DISEASE.

If you see a man walk about, see that he is able to stand firmly upon his legs, and that he grasps with both hands firmly, etc., you are at once inclined to think that there is no paralysis. I must say that, although there are many cases of disease of the brain in which there is not marked paralysis, my belief is that, in every form or kind of brain disease, were we in the habit of studying the patient more care-

fully, we should have a great chance of finding some degree of paralysis.

Most of the instruments employed for this purpose are exceedingly defective.

[A description of an instrument was given. The inventor is one of the Professor's friends. It gives a very clear measure of the strength of the legs, and it can be used to measure the strength of any part of the body.]

I do not think that we can find the exact strength a patient who has brain disease possesses, unless it is measured by some reliable instrument. When I say that sometimes disease almost entirely destroys one corpus cerebellum, or any other part of the brain, without the production of anæsthesia or paralysis, I only mean that so far as the cases have been recorded, no paralysis has been noticed, but I suspect that some degree of paralysis was present.

#### ULCERATION OF THE OS UTERI.

The *Doctor*, for October, contains the following practical article:—

All acquainted with the practice of an outpatient department for the diseases of women cannot fail to have been struck by the very numerous cases of ulceration of the os uteri presenting themselves for relief. The cases are so common, the distress of the affection so debilitating, the discomfort to married life so great, and the cure so within the limits of the ordinary practitioner, that we hope to do good service by a few remarks on the subject. We shall classify the cases, dividing the os into three zones:—

1. Ulceration at the os uteri, on one or both lips.

2. Ulceration extending to half the inferior part of the cervix uteri.

3. Ulceration involving the whole of the cervix and os.

1. Ulceration at the os uteri, on one or both lips. (a) Very many of these cases pertain to the newly married, and are undoubtedly the result of excessive venery. There is always a history of nausea or retching, backache, a white or muco-purulent vaginal discharge, some scalding on urinating, vaginitis or vaginismus, and constipation. An examination by speculum reveals an abraded surface, some discharge about the os and more or less uterine congestion. (b) Other cases belong to multiparæ, who have had untoward labors, whereby the external os has been lacerated, and one or other lip has become inflamed, and taken on unhealthy action. This condition is generally a bar to future pregnancy. In both classes cervicitis may be present. The lesion does not affect the cervical canal to any extent.

2. Ulceration extending to half of the inferior part of the cervix uteri. These cases are

very common, occurring in women who have had difficult or many labors. The extraction of the child has divided the os into two portions, of which the posterior has been generally found to be the larger. There is a more or less free muco-purulent discharge from the vagina, and in addition to the symptoms enumerated under Class 1, the patient complains of dragging pain in either one of the groins, with pain extending to the knee of the same side. On digital examination the finger readily enters the cervical canal, and ulceration is detected. Pressure on the uterus elicits pain: the fundus is somewhat displaced; the whole organ is invariably enlarged. The extent of the disease is not seen by the speculum, which tends to bring the divided parts together: hence the necessity of a careful digital exploration.

3. Ulceration involving the whole of the cervix and os. On exposing the parts the cervix is found to be inflamed, soft, tender, much enlarged. Cervicitis is marked. The os is generally round, and the cervix is somewhat flattened at its free extremity, as if it habitually rested on the perineum. This affection is usually noticed in old cases of prolapsus, in virgins, and in sterile women. The cause may be attributed to flexions, relaxation of the uterine ligaments, and excessive venery. In these cases the pain extends along the spine and shoots down to either knee. There is pain in nearly every position the body can assume. Care is required to discriminate between these cases and those of a malignant type.

*General Treatment.*—We cannot too forcibly inculcate the necessity of absolute rest in the horizontal position. By this means, congestion about the uterus is lessened, and the ulcerated surface prevented from impinging on any part. The diet should be liberal. The bowels should be kept well opened. All marital intercourse should be forbidden.

*Medicine.*—There being generally a state of anæmia to contend against, we would first recommend the vegetable tonics and cod-liver oil, afterward the ferruginous preparations. Where any induration exists, iodide of potassium should be administered. It is essential to raise the tone of the body, as concurrently with its improvement, so the healing process will be expedited.

*Topical Applications.*—Much care is required in deciding whether to deplete or not, in choosing the form of caustic to be applied, and in prescribing an effectual injection. In all cases where the veins are prominent about the os, we would commence either by leeching or puncturing with a lancet. The latter we prefer. In cases of slight ulceration, touching the part with nitrate of silver or chromic acid followed by a plug of cotton wool steeped in glycerine, is generally effectual. Should the ulceration be obstinate, we would apply fuming nitric

acid. The cotton-wool, saturated with glycerine, must be introduced daily. Where the lips of the os are divided, it must be concluded that the inflammation has extended along the cervical canal. In these cases the external os should be well burned with the caustics named: if necessary, the actual cautery should be employed; but the cervical canal must not be molested. These failing, plugs of iodized cotton-wool should be applied daily.

#### ON THE INFLUENCE OF SLEEP ON THE ACTIVITY OF THE KIDNEYS.

It has been ascertained by Prof. QUINCKE (*Archiv für experimentelle Pathologie und Pharmacol.*) that whereas the urine secreted during sleep is scanty and of high specific gravity, that secreted during the first three hours after waking is more abundant and of lower density than during any similar period of the twenty-four hours. A number of observations were made to establish this point, the subject remaining in bed, and taking neither food nor drink for the three hours in question. The fact admits of being interpreted in various ways. We may suppose the absorption of fluid from the intestinal canal to be arrested during sleep and resumed on waking. This hypothesis is a most unlikely one, for the periodic variation takes place as usual when no liquid has been taken within four hours of retiring for the night. It is probable that the physiological activity of the kidneys may be checked during sleep, owing partly to diminished energy of the secretory nerves, partly to contraction of the renal blood-vessels, partly to a lowering of tension throughout the arterial system. This is the most probable explanation, but it is still in need of proof.—*London Med. Record*, Oct. 15, 1877.

#### QUINIA ERUPTIONS.

Dr. Ringer, in his "Handbook of Therapeutics," states that workers in bark sometimes suffer from a scaly papular eruption, sometimes from a vesicular weeping eruption, and occasionally with great swelling of the genitals or of the face and eyelids, with redness of the eyes. Itching of the whole body and urticaria are also said to have been produced by quinine. A recent number of the *Berliner Klinische Wochenschrift* contains two communications on this subject, one from Dr. Buch of Hamburg, the other from Professor Pflüger of Berne. Dr. Buch's case was that of a man-servant, æt. 25, suffering from intermittent fever. For four or five days the patient took a grain of quinine every two or three hours, and on the fourth day an exanthematous eruption, in small patches, the size of a pea, reddish in colour,

and somewhat raised, appeared on the legs. The eruption disappeared on pressure; there was neither pain nor itching. The spots gradually became pale and disappeared, but a few days afterwards, on the medicine being resumed, the back was found to be covered with similar patches, some very large, and a few smaller papules. There was also considerable pain and tenderness in both knees, but no swelling. The eruption disappeared with the discontinuance of the medicine. Posner (*Handb. der klin. Arzneimit. lehre*) mentions that rheumatoid pains sometimes follow the use of quinine. In Professor Pflüger's case the patient was a musician, very anæmic, and much reduced by venereal disease and mercurial treatment. By way of a tonic he was ordered decoction of bark. He had taken twenty-one doses when he was seized with shivering followed by fever, a feeling of intense itching and burning, especially in the hands and arms, which parts, as well as the face and feet, were much swollen and reddened. There was much excitement, distress, and thirst. The patient attributed his symptoms to the medicine, and asserted that he felt them coming on after the second dose. The febrile symptoms lasted for three days, and in fourteen days the patient was much as usual. There was some desquamation of the epidermis. Dr. Pflüger concluded that the symptoms were due either to some impurity in the medicine, or to some idiosyncrasy on the part of the patient. He therefore tested the matter further by administering small doses of quinine. All the symptoms at once returned, and with increased intensity; the face, arms, and hands were enormously swollen, so as to suggest an attack of violent erysipelas. These symptoms lasted longer than before, and the desquamation on the hands was so marked that the separated portions resembled fragments of a glove.—*Med. Examiner*, Oct. 25, 1877.

#### CHURCHILL'S TINCTURE OF IODINE.

By THEOPHILUS PARVIN, M.D.

Churchill's tincture of iodine is so valuable in uterine therapeutics, it is to be regretted that druggists are not more generally familiar with its preparation. It has happened to me within a few weeks to have two prescriptions for this tincture filled, in one case, with the ordinary tincture, in the other with the so-called colorless tincture. Even when an eminent teacher in a college of pharmacy was applied to by an Indianapolis druggist for the formula for Churchill's tincture, he gave one for a compound of iodine and chloral in alcohol, and also referred to the solution of iodine in glycerine advised by Thomas!

The following is Churchill's formula as given



in the fifth edition of his *Diseases of Women*: he stated then, 1964, that he had been using it for twenty years:

|                      |                 |            |
|----------------------|-----------------|------------|
| B Iodin. pur.....    | $\frac{3}{4}$   | iiss.      |
| Iodid. potassi.....  | $\frac{3}{4}$   | ss.        |
| Spt. rectificat..... | f $\frac{3}{4}$ | xii.       |
| Alcohol.....         | f $\frac{3}{4}$ | iv. Solve. |

After employing this tincture for thirteen years, I know no single agent used in the local treatment of uterine disorders at all equal to it. It may be used as a stimulant, alterative, counter-irritant, caustic, and as a hemostatic, and for the purpose of exciting absorption of hypertrophied tissue. Its hemostatic properties are of especial utility in the treatment of hemorrhagic endometritis, and after the use of the curette or forceps in the removal of the smaller intra-uterine growths, hypertrophies of the glandular and vascular elements of the lining membrane. —*American Practitioner*.

#### THE USE OF HYDROBROMATE OF QUININE IN DISEASES OF CHILDREN.

In a communication to the *Allgemeine Med. Central Zeitung*, Dr. Steinitz, of Breslau, gives the results of his experience of the use of hydrobromate of quinine in children's diseases.

He used it in an extensively prevailing epidemic of whooping-cough, giving it generally in a mixture composed of three to five parts of the hydrobromate in one thousand of syrup, the dose being a teaspoonful every two hours. In no case was it necessary to use any other remedies. The whooping-cough had in twenty-three cases lasted on an average ten weeks, and in fifteen others twelve weeks; and in the use of the remedy the paroxysms became in the course of a week less frequent and milder. No after-effects upon the alimentary canal were discovered. Three deaths occurred, all in very atrophic and scrofulous individuals, in whom other complications were present. Dr. Steinitz takes the opportunity of remarking that he prescribed in several cases the extract of castanea vesica, which has been extolled as a remedy, but without good results.

He also used the hydrobromate of quinine in cases of spasm of the glottis. Three of the patients died after only a few paroxysms. The remaining six recovered. The medicine was prescribed as stated above, and was borne well. In all the six cases the attacks diminished, at times varying from the third to the fifth week, in intensity as well as in frequency; and the duration of the disease was in no case longer than from four to six months. This result is satisfactory when compared with the previous course of the disease under the use of other medicines, such as bromide of potassium, oxide of zinc, valerian, and musk, none of which could be borne for several months together.

Dr. Steinitz has also given the hydrobromate of quinine in the dental convulsions of children, but cannot as yet speak of its efficacy in this malady. He regards it, however, as deserving a trial.—*London Med. Record*.

#### CLINICAL LECTURE ON FRACTURE OF THE FEMUR.

Delivered in the Amphitheatre of Bellevue Hospital, New York.

BY

FRANK H. HAMILTON, M.D., Surgeon to Bellevue Hospital, etc.

GENTLEMEN:—I shall to-day show you some cases of fracture of the femur which have united, or are uniting, under the plan of treatment that I have successfully used for the last few years. I shall show you these patients, in order that you may understand the peculiarities of our practice, and see the points of difference that may exist between it and other methods of treatment now in use.

In order that you may fully appreciate what I shall have to tell you, it is necessary that I should call your attention to the progress that we have made in the treatment of this injury during the last century. In doing this, I shall limit myself entirely to the consideration of fractures of the shaft of the bone, not including fracture of the neck or of the condyles, and, furthermore, my remarks will be confined to fractures occurring in adults. The treatment of fractures of the neck and condyles and of the shaft in children, requires special consideration, and I wish to speak now of the general management of fractures of the shaft in adults.

First, then, I wish to remark that fractures of the shaft of the femur are almost always oblique, so much so that it almost never happens that we can set them, in the ordinary acceptance of that term. They are almost invariably so oblique that, unless we can manage to keep them constantly in position by means of extension and counter-extension, the fragments will override each other to a considerable degree. These specimens which I have brought here to show you will illustrate this fact very nicely. There will always be as much extra thickening as you see in the bone that I hold in my hand, unless you can overcome, by some means, the force of the powerful muscles that cause the displacement, for two, or three or four weeks. In any case there will always be as much projection as the thickness of the shaft of the bone. You will observe the same thing in this specimen, though the fracture was higher up in the bone. There is a distance of four inches between the points of the fragments. You see at once that there can be no such thing as setting. The ends of the bone may be placed in a favourable position, and held there, but they will never hold them-

selves. In this instance, although extension was made, and plaster-of-Paris applied while the patient was under chloroform, you see how much shortening there has been. The patient died a few years after the injury, and, on autopsy, it was found the shortening was as much as could be permitted to take place. The lower fragment had overridden the upper until it had ascended as high as the neck of the bone, which would allow it to go no further. In this third specimen, also, you see the overlapping of the fragments, but here you see, likewise, that there was an extraordinary proliferation of bone.

Here, then, is the question that confronts you in the beginning: How is the tendency to overlap to be overcome? Not by setting and bandaging, because the muscles act too powerfully to allow the fragments to be held in place; lateral supports would not be sufficient, as this method would not prevent shortening. How, then, I say, are we to overcome it? Until the latter part of the last century all surgeons employed a straight splint, simply pulling the limb out, and binding a long splint to it. This method is illustrated by the splints I now show you, that were given to me by a surgeon who served under Stonewall Jackson. It is a simple and practical device, and was employed by the surgeons who followed that great commander. It was the only device which could be employed and conveniently conveyed by an army moving only on horseback. Essentially this plan of treatment was followed up to the time of Pott, of England, who wrote a brief essay on fractures, declaring that hitherto fractures of the thigh had always united with shortening; but he suggested an improvement on the old plan, which was soon accepted by English and American surgeons, but not by the French and Germans for some time. This improvement was the flexed position, and it soon became known as the position of the double-inclined plane. His theory was a specious one. This plan of treatment by the double-inclined plane or flexion has its advocates up to the present time. In the United States it has been adopted chiefly by Dr. Nathan Smith and his son, and by Dr. Hodgen, of St. Louis, each one of whom, however, employs also suspension. There are, as I have said, a few leading surgeons who use it still to-day, but almost universally we have returned to the straight position.

There have been many forms of splints for the straight position. There was Boyer's apparatus, in which there was a screw at the bottom, to pull the leg down. Then there was Des-sault's modification, and after these there have been an almost inexhaustible number. There are no less than thirty or forty that I could mention. Here is one with a screw working inside of a box, and a strap to attach to the foot. Here is one invented by a Canadian sur-

geon, which has a screw at the bottom, and a cross-piece to keep it steady on the bed. This is Bowen's splint. Here is still another; but it is useless to show more of them, there is so great a variety; they are, however, all modifications of the old long splint. Now, how did they contrive to get hold of the foot, in using this form of apparatus? Always by means of a gaiter. Here I show you Gibson's, which, as you see, is well padded, to prevent excoriations. Here is another, which has the virtue of being red, and there are a great many others, all so devised as to prevent, if possible, excoriations of the skin. But, notwithstanding the numerous kinds, there always was ulceration when the extension applied was equal to fifteen pounds. I have seen many of these, sometimes enormous in extent, that have lasted for many years.

Now, in the straight position, besides extension, we must have counter-extension, and our next inquiry must be to see how this was accomplished. It was always obtained by some mode of pressure in the perineum. At first, a long splint, padded, was pressed up in the perineum, and bound to the limb. Then a perineal band was used, flat or round, placed between the thighs, and fastened at the head of the bed, or to the upper end of the long splint. The best of these was a flat pad, of cotton, sewed up in stout linen. But all of these methods were extremely liable to cause bad ulceration and sloughing in the perineum, especially with delicate females. I recollect a case of a man who had an ulceration as broad as my hand, and very deep, that it took a long time to heal, caused by one of these perineal counter-extending bands. So here we were between two evils: first, trouble with the extending band at the foot; and, next, the same difficulty with the counter-extension at the perineum. We were always limited in extension to ten or fifteen pounds, and never could go beyond it without fear of producing the most disastrous results. At length, Josiah Crosby, of Hanover, devised a method of obviating these difficulties by means of adhesive bands, which took hold on both sides of the leg, all the way up to the knee, and thus distributed the pressure so that it did not fall on any one part. In this way the instep was saved from bearing the brunt of the force, and it was found that an extending weight of twenty pounds or more could be used, and never cause an ulceration. This method was invented twenty-six years ago, and was one of the greatest triumphs of surgery.

As a means of counter-extension, Dr. James L. Van Ingen, of Schenectady, first suggested raising the foot of the bedstead. More than twenty years ago he sent me a letter in which he described his plan. I said, at that time, that it would not do, as he elevated the foot of the bedstead about two feet. I did not believe that it would answer, as the position was too

uncomfortable for the patient to remain in for any length of time. The idea, however, was an excellent one, to use the weight of the patient's body as the counter-extending force. Dr. Moore, of Rochester, however, took up the idea, and pretty soon it became generally adopted. It was soon found that it was not necessary to raise the foot of the bed so high, and still gain the object; four or six inches will suffice, and the position of the patient is by no means uncomfortable. It is now many years since I have seen a perineal band in use.

This, gentlemen, is what we have thus far gained in the treatment of fractures of the femur. We have found a means of extension by which we can apply twenty to twenty-two pounds of force, and the same with counter-extension. We are now speaking of the injury as occurring in adults; when the patient is a child, we do not need so much force. In placing the patient in position, the pillow must lie under the head only, and always away from the shoulders; otherwise, we can only utilize the weight of the pelvis for the counter-extending force.

Now, why is it that we can only use twenty to twenty-two pounds of extending weight and no more? The reason lies in the fact that the force must be limited by the ability of the ligaments around the knee-joint, and especially the posterior ligaments, to bear the force of extension, and these cannot bear a greater amount of extension. The pain produced by the stretching first begins behind, as these ligaments are not accustomed to tension. In the normal position the posterior ligaments are not put upon the stretch. We never stand perfectly straight, and if we try to do so for a moment, the tension upon the posterior ligaments causes pain. When we apply the extension apparatus, we are pulling upon ligaments that are unaccustomed to a strain. Some individuals will endure twenty pounds, and some even twenty-five pounds, but the last is excessive. My rule is to apply the extension at first very moderately, and add to the weight until the patient cries *peccavi*. These, then, are the steps of progress, and they are easily marked.

A few years ago, under the suggestions of the German surgeons, to whom we owe many improvements in surgery, we began to use plaster of Paris; but this was a step backward, instead of forward. By this method we cannot get the slightest extension or counter-extension. The limb shortens as much as it is possible for it to do, and you can easily see the reason. If you put the plaster all the way up to the perineum, and endeavour to use that as a point for extension, you will get ulceration. In one case I saw an enormous ulcer as the result of this. If you do not use the perineum as the means of obtaining the extension, you have to use the oblique surface of the thigh and the curvature

of the nates. In a small man this amounts really to nothing, and the consequence is, that the plaster rapidly loosens, and you have not the slightest extension or counter-extension. While the plaster method was being used in this hospital, I saw more shortened and more crooked legs than there ever were before, and, besides that, I saw three deaths. Taking it all in all, so far from making progress were we, in adopting this method, that we actually took a retrograde step, and I am happy to say to-day that the practice is now almost entirely abolished. I assure you that you will never use it more than twice in country practice. I speak of it, not in order to advise it, but I am obliged to refer to it, because it was once getting into extensive use.

But let us see what we use now. Look at this patient, and you see the limb held closely by adhesive plaster, and fortified by a bandage, and to the foot-piece, which is clear of the malleoli, is attached a weight, acting over a pulley. This method is sometimes called Buck's extension, but it was not his invention any more than mine, nor mine more than any other person's. With this mode we ought not to get above three-fourths of an inch of shortening, and I so stated when I first published my book. In this case, you see, there are two cords and weights, one on each side of the foot-piece. This is a device of my assistant house-surgeon, Dr. Munroe, and is designed to prevent rotation outward of the limb, which it does very nicely.

You might suppose that extension would keep the bones from uniting, but this is not at all so. So long as I have treated fractures of the thigh, and it is now nearly forty years, I have never yet met with a case of non-union in my own practice. I have seen such cases in the hands of others, but it has never yet been my misfortune to have a case of the kind of my own, although I have often seen them nine weeks in uniting.

In this second case that I point out now, as you see, a silicate of soda bandage has been used, but it is entirely unnecessary. On this patient we have used a contrivance of Esmarch, to prevent the outward rotation. The leg is settled in a pad, with a broad under-rest, which is fastened to a cross-piece, steadied on a frame, but slides slightly up and down. We have just begun to try it, and cannot, as yet, form a definite opinion of its value.

In this case you see everything that we generally use, and that is called Buck's extension apparatus; but, as I previously remarked, although we are indebted to Dr. Buck for many practical points in the treatment of fractures, and especially of this fracture, the credit of its invention does not belong to him. It may, with most propriety, be called the American plan exclusively. The extension is made by one pulley and weight. Dr. Buck used an up-

right piece of wood, with a pulley fastened in, and this was fixed to the foot-piece of the bed. The weight may be anything that is convenient—a stone, a brick, a flat-iron or a bag of shot. Instead of the wooden upright that we formerly used, we now simply employ an iron wheel, which is fastened to the bed with screws. The foot-piece to which the cord is attached must be quite broad, so that the adhesive plaster will not press on the malleoli. The plaster is laid only up to the knee, and not on the the thigh, above, for, if it is, it may do as much mischief as good. Then the plaster is held more firmly in place by a bandage. It may give a quarter of an inch or so, but never entirely. This method was first described, as I have before said, by Dr. Crosby, of Hanover, New Hampshire.

Over the fracture itself we should place four short side-splints, so as to nearly encircle the limb. The best material for this purpose is felt, made of several thicknesses of cotton cloth, secured in place by five or six separate pieces of bandage. We can thus open and inspect the fracture a dozen times a day, if we choose. To prevent eversion, we use a long splint, which will run along the entire length of the body, and hold it in an unchanged position, and I regard this long splint as one of the most essential things in the treatment. Its utility is twofold: *first*, in preventing eversion, and, *secondly*, preventing bending outward at the point of fracture. The small splints are placed inside the long one. This, then, is the model splint, the perfected method. Let us for a moment recapitulate its elements. Extension is made by weight and pulley, and the attachment by adhesive plaster. We have four short splints, a long splint, and the counter extension is obtained by utilizing the weight of the body, by raising the foot of the bed.

In the plaster of Paris method we always used to find that, at the end of a week or two, the dressing had become loose. We had then to open it, and cut out a piece, in order to bind it tighter, and when we did this, it would not lie evenly on the leg; it did not fit, so that we were obliged to take it off entirely, and apply a new one. This was a prodigious labor. In this case my house-surgeon has put a limb up in plaster, in order to show you the method. It must go below the ankle, to get extension, and above the pelvis, for counter extension; but it gets loose in a very short time, and the fact is, that we do not get either the one or the other.

Now, in regard to measuring a limb, I will say a few words: There is no difficulty in getting the length accurately; at any rate, we can get it with certainty up to one or two-eighths. I do not measure from the round edge of the anterior superior spinous process of the ilium, but get my finger under it at the insertion of the tensor vaginæ femoris, and press.

From this point I measure to the external malleolus.

Dr. Jarvis S. Wight, of Brooklyn, in a paper published in the *Archives of Clinical Surgery*, by a number of measurements made on healthy individuals, attempts to prove that nearly every person has naturally a shorter limb on one side than one on the other, and that often, after fracture, we find apparent shortening where there is, in reality, none whatever, the fracture having taken place in the already short limb. This cannot be so, for in nine out of every ten cases of fracture of the femur we do get actual shortening; and how would this happen so constantly if the fracture had occurred in the longer limb?—*New York Hospital Gazette*, Nov. 15, 1877.

#### IMPACTED CERUMEN.

Free syringing generally is all that is required for the removal of this common and troublesome cause of deafness. Often the mass does not come away until a considerable time is spent in syringing. But it will always ultimately yield. After a portion has been removed, and when the grub of cerumen or waxy cast of the meatus is washed out, the latter should be examined with a speculum. Much harm may be done if this step be not attended to, the healthy membrane may be forcibly syringed and much mischief accrue. On the removal of cerumen, the membrane is generally seen dull, with an absence of transparency, and the surface of the malleus has an inflamed appearance. The collection being removed, an interval of a few days will generally set things to rights; and if this be the sole cause of the symptoms nothing further is necessary. If any tinnitus or pain persists, or if the deafness is not relieved, we must suspect other mischief and proceed to examine the ear closely. The usual complaint made by patients suffering from "wax in the ear" is a deafness with a stupid feel and some form of tinnitus. I generally Politizerize a patient after removal of wax. I may here say that most ridiculous errors are often committed from the non-recognition of this simple cause of deafness. Nothing can be more exasperating than for a patient to return a long distance to a surgeon, and find that the source of all his blistering and leeching, and perhaps physicking, lay in a mass of easily removable wax; yet this often occurs. The characteristic black shining surface of the wax can hardly be mistaken with any degree of care. At times the surface has a peculiar lustre which causes it to look like the membrane; but it is only necessary to mention this in order to prevent any surgeon from falling into so unfortunate an error. Two imprudent practices may be referred to in connection with this matter. First, the habit of inserting picks,

rolls of towels, etc., into the ear to cleanse the meatus. This can only do harm, and ensures the consolidation of any cerumen in the canal and its impaction on the drum. Secondly, the fashion of placing cotton wool in the ear. It will be sufficient to mention that not long since I removed three layers of wax and two of cotton wool from the ear of a gentleman who was completely oblivious of the presence of the wool.—*H. Macnaughton Jones, M.D., in Dublin Medical Press and Circular.*

#### MIDWIFERY WORK.

It is curious to speculate on the amount of midwifery work that can be done by one practitioner. Lately our attention has been directed to an instance in which twelve cases a week, or over six hundred a year, were attended in one practice. The practitioner, naturally enough, required a holiday, and engaged a *locum tenens*. He promised the *locum tenens* a "very easy time of it," as it was the slack season and summer time. To the surprise of the *locum tenens* he found thirty visits daily had to be paid, he was up every night with midwifery, and on one occasion had three cases in the twenty-four hours. Opinions would differ, of course, as to what constitutes "a very easy time of it." To our thinking such work is almost incredible, and we are disposed to look upon the man who can do it as a sort of prodigy. Probably it is not done alone by one man. Certainly no one individual should do it. Half this number would exhaust the powers of an ordinary man, especially when added to the usual work of practice. Even half the number of cases generally implies an assistant or a partner. Then it would be curious to know what the average stay with a patient in labor is. There must be a good understanding with patients that they are not to send till an advanced stage of the case. We are really curious on the subject. While confessing to thinking strongly that such an amount of obstetric duty is bad both for the patients and the accoucheur, we should be glad to know how it is accomplished; what amount of sleep falls to the practitioner; with what frequency instruments are used; what is the proportion of cases in which the child is born before his arrival; how long the work can be done by one man without obligation to his neighbors or the help of an assistant; and what is the number of years over which it can be extended without injury to health.—*The Lancet*, November 10, 1877.

A correspondent of the *N. Y. Medical Record* writes as follows concerning the way in which they manage "these things" in the town of Waterbury, Conn.: "There are no losses, however, as *all* the bills are paid, and there are no free patients. The poor of the town are

admirably provided for, and I wish some such plan could be adopted in New York City. When a patient wishes to avail himself of the dispensary, he is obliged to apply to one of the "selectmen" for a recommendation. If the selectman is not satisfied as to the applicant's poverty, the application is *refused*. When, however, the case is genuine, the selectman gives the patient a ticket of admission to the dispensary, and the *town* pays the doctor and buys the medicine; consequently Waterbury neither manufactures paupers nor starves its doctors. . . . The people seem not only grateful for what is done for them, but also anxious to settle their bills."

#### RAISING THE ARM IN EPISTAXIS.

Dr. Mackenzie, in an article in your last number, alludes to the treatment of raising the arm above the head, and stopping the nostril on the affected side, as sometimes effectual in arresting the flow of blood.

Having tried this plan on one or two occasions effectually, I naturally sought for an explanation of the success of a method apparently so empirical. The reason of it at length appeared to me both simple and interesting. It was this: In holding the arms up above the head—for in my cases I did both,—the scapulæ are elevated and rotated outwards. and by this means extension is made upon the ribs by the serrati magni muscles; the chest thus expanded causes an increased flow of blood from the venous or right side of the heart to the lungs, and *pro tanto* from the head, and a temporary or partial stasis or diminished flow of blood to the left or arterial side of the heart, thus reducing the *vis à tergo*, and allowing to such extent, therefore, time for the blood to coagulate in the vessels of the nose.

This explanation was confirmed by an observation which just reverses the condition of things. A patient came to me suffering from occasional attacks of hæmoptysis, and spontaneously remarked "that it was sometimes brought about by raising his arms above his head, as in removing anything from a shelf or otherwise." This statement beautifully fitted in with my views, and struck me at once as a remarkable confirmation of what before might be taken only for a possible or plausible explanation.—Robert W. Ellis, in *The Lancet*, Nov. 17.

*Signs by which Phthisis is recognized in its Earliest Stages without the Aid of Physical Examination of the Chest.*—(*The Medical Record*, September 1, 1877.)

1. Retraction of the skin over the cheeks.
2. Cerulean hue of the sclerotic, due to anæmia of the conjunctiva.

In bronchitis and emphysema there is conjunctiva, and also in the later stages of phthisis.

3. Atrophy of the lips, of the ears, and a thin pinched appearance of the nose. Wherever the skin



closely covers cartilages, as in the ears and nose, a showing through, as it were, of the cartilaginous framework is one of the earliest signs of the loss of flesh.

4. Pallor of the cheeks and face as compared with each other and with the malar surfaces.

5. Dilatation of the nostril upon the affected side. This is the case in all pulmonary affections, but especially in the earliest stages of phthisis.

6. The respiration is invariably accelerated, and the disturbance affects expiration as well as inspiration. In certain nervous disturbances the respiration is accelerated, but it is the inspiration only which is at fault.

7. Sinking of the clavicle more upon the affected side than upon the opposite, and giving the appearance of having a very long neck.

8. Great hyperæmia of the pillar of the fauces, present long before the pulmonary disease manifests itself, and continuing until pus is expectorated. When purulent expectoration is established, decomposed pus irritates the throat, and then the other parts usually become hyperæmic.

9. Intense congestion of the throat, early hoarseness and vomiting are unfavorable symptoms, and indicate enlargement of the bronchial glands. This vomiting is caused by pressure upon the pneumogastric by the enlarged glands. A large proportion of phthisis cases will tell of having had sore throat for a number of years previous to the development of any chest symptoms.

## THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D.L.R.C.P., LOND

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MONTREAL, JANUARY, 1877.

"Notice is hereby given that application will be made at its present Session of the Parliament of the Province of Quebec, to authorize the College of Physicians and Surgeons of the Province of Quebec to grant a license as physician and surgeon to Robert J. Burke, of Stanstead Plains after examination."

"Stanstead Plains, 22nd December, 1877."

We cut the above notice from the *Quebec Official Gazette*, where, we doubt not, it has been seen by very few of the profession. If it had been seen, we are of opinion that action would have been taken by some, at all events, of those who represent the profession on the Provincial Medical Board to oppose any such legislation as is applied for. We are aware that, at the meeting of the College held at Quebec in September last, several graduates of American schools applied for an examination, which the Board felt they could not legally grant, and so

decided. We are likewise aware that one of the Governors suggested some such legislation as applied for above, with a view of meeting the difficulty. Subsequent to this discussion, however, the Committee on the new by-laws of the College reported, and in Section 6, of Chapter V., provided for the difficulty. This clause states that before any person from recognized Colleges outside of Her Majesty's Dominions can obtain the license, he must attend a six months' course at a Medical school in this Province. After this he is in a position to go up for the preliminary and professional examination before the Board if he should not elect to graduate at the school he has attended. This by-law was passed by the Board, and on the 3rd of December last, by an order in Council of the Lieut.-Governor of the Province, it, with others, became law. Now at the very next session of the Legislature we find special legislation being introduced to counteract this by-law, which after mature deliberation was adopted. We think this attempted special legislation should be condemned by all who have the interest of the profession at heart. The gentleman making the above application began practice in this Province in direct violation of a previous Act, and had not the Act, which was very defective, been superseded by the present one, doubtless he would have continued to practise without fulfilling the requirements of the law. The present Medical Act being strict in its penal clauses, all who are unqualified to legally practice in the Province of Quebec are anxious *now* to put themselves right. After much discussion the Board has decided how this can be done. We think it unwise therefore for the Legislature to step in and force upon the Board for examination certain persons from Colleges outside Her Majesty's Dominions who refuse to enter by the path decided upon and provided for by by-law of the College of Physicians and Surgeons. Again it is positively unfair to those who, occupying a position similar to the above applicant, have, in compliance with the by-law referred to, been since last October in attendance at the various schools of Medicine in this Province. We are told, but to us it seems incredible, that the secretary for Quebec of the Provincial Medical Board, on being called before a Committee of the House, expressed his opinion, that the Board would not be opposed to such a Bill as applied for by Dr. Burke.

We hold that the Secretary, nor any other officer, had the right to express any such opinion. Their duty is simply to enforce the Act and the by-laws of the College, and the Act applied for, being in direct opposition to the latter, should receive their unrelenting opposition.

#### BELMONT INEBRIATE ASYLUM.

On reference to our advertising columns our readers will observe an advertisement relating to the Belmont Asylum for the cure of Inebriates, and the treatment of this unfortunate class is of such vital importance that we propose to devote to it some little space in this issue. The evils arising from the immoderate use of intoxicating liquor are so heart-rending, so widespread, and so generally recognized, as to require no comment from us. So much, indeed, has this question forced itself upon the attention of our profession and of the public that, in our day, it has become a subject of legislation on this continent, in Great Britain, and elsewhere. Formerly, intemperance was looked upon as a crime, and the victim punished as a criminal, but it is now getting to be admitted that intemperance is a *disease*, and that efforts for its repression should be curative in their nature, as in the case of any other disease. Dr. Parish, President of the "American Association for the Cure of Inebriates," in delivering an address before the Association in New York, in 1872, said:—"I believe we are a unit on the proposition that intemperance is a disease. We are dealing with it as a disease of the most grave and fearful character. \* \* \*

We confess to much astonishment that some public teachers should be so ready to stand in the way of reclaiming inebriates by any way whatever. It is difficult to comprehend why objection should be made to a man who believes himself to be diseased seeking relief from a physician, or going to an hospital where he can receive aid under the most favorable circumstances, any more than to a man who is convicted of sin and repentant seeking Christian counsel and sympathy to aid him to reform." A Committee of the British House of Commons, appointed during the same year to look into the matter, strongly recommended the establishment of reformatories for inebriates. The report stated that—"Small fines and short imprisonments are proved to be useless, as well by the

testimony of competent witnesses as by the fact that the same individual is convicted over and over again to even more than one hundred times. \* \* \* It is in evidence that a large proportion of the criminals passing through our gaols attribute their fall to drink, one witness having stated the amount as equal to seventy-five per cent. in a particular gaol; about twenty per cent. of the insanity recorded in Great Britain, and about fourteen per cent. in the United States, are placed to the same cause, and nearly one-half of the idiots in the latter country are stated to be the offspring of intemperate parents."

Now we have the experience of many prominent physicians, who have stated that a twelve months' total abstinence from all liquor is sufficient to take away the desire for it from even the most confirmed or hereditary drunkard, and in view of the foregoing facts should we not do all in our power to assist those afflicted with this terrible disease in emancipating themselves from its shackles. In the United States this matter has received much attention, and there are now a number of institutions of the kind in that country. A novel experiment has ing been inaugurated in Minnesota, viz., that of imposing a special tax on the liquor-sellers of the State for the purpose of the support of the State Inebriate Asylum, which tax was adjudged perfectly constitutional by the Supreme Court, and was, we believe, collected.

The Belmont Retreat for Inebriates, started in 1864 by Mr. Geo. Wakeham, who was for many years previously Superintendent of the Beaufort Lunatic Asylum, is, we believe, the only institution of the kind in the Dominion of Canada. It has a Government license, and is aided by a small annual grant from the Local Government; it has generally under treatment from twenty to twenty-five patients, but has accommodation for more than twice that number. It has struggled on in the face of numerous difficulties, and is certainly an institution which should be supported by the inhabitants of the Dominion, in preference to sending afflicted ones to the neighboring States for treatment. Situated in one of the most picturesque spots in the environs of the city of Quebec, surrounded by extensive grounds and gently sloping meadows, with a background of scenery well fitted to induce repose and peace: these

natural advantages, combined with the care and attention which the patients receive, have led to the permanent cure of a large number of those who have remained in the institution the necessary time, the proprietor computing his cures at about seventy-five per cent. We would urge upon the Local Government, and especially upon the Treasurer, to whom, as a medical man, the subject will come home, the desirability of augmenting the present grant to this deserving institution; such a measure would, we are sure, meet with the approval of the country, and we think it would also be well were the Minnesota experiment tried, and the state aid to such an institution drawn directly from the pockets of the liquor-sellers by a special tax, a proceeding, the reasonableness of which will be admitted, doubtless, by all but the liquor-sellers themselves.

In this Province an act was passed in 1870, providing for the interdiction of habitual drunkards, in order to restrain them from squandering their property. This Act, whilst conceived with the best intentions, has proved, so far as we can learn, defective in many points, and it should be superseded by a Commitment Act such as that in force in the neighboring States. This Act provides that, "any Justice of the Supreme Court, or the County Judge of the county in which any inebriate may reside, shall have power to commit such inebriate to the State Inebriate Asylum, upon the production and filing of an affidavit or affidavits by two respectable physicians and two respectable citizens, freeholders of such county, to the effect that such inebriate is lost to self-control, unable from such inebriation to attend to business, or is thereby dangerous to remain at large. But such commitment shall be only until the examination now provided by law shall have been held, and in no case for a longer period than one year."

The Local Parliament being now in session we think the time opportune for calling attention to these matters, with a view to the inception of such further legislation as may seem desirable on this all-important subject, and we would especially recommend a liberal and substantial grant to the Belmont Retreat, to aid it in its struggles towards a more secure footing. We know that the proprietor is always happy to show visitors over the premises and afford

them all information, and we would advise members of the Local Legislature, now in session, to visit the Retreat, and thus, perhaps, obtain some ideas which may be of use in any future legislation on the subject.

#### ILLNESS OF DR. PELTIER.

We are sure there are many among our readers who will regret to learn that Dr. Hector Peltier, of Montreal, was seized with an apoplectic attack on Tuesday the 22nd of January. As we go to press we learn that there are no signs of improvement, and little hope of a favorable issue.

#### MONTREAL BRANCH OF LAVAL UNIVERSITY.

We are no longer left to give our readers news on this subject, which some, perhaps, might feel inclined to doubt, for the official announcement of the appointments in the Medical Faculty have been issued, and are given below. We can only add, that we regret exceedingly to see some of the most important chairs so split up between several professors as to show that side influences have been strongly at work. Edinburgh, Glasgow, and King's and University Colleges, London, only require one Professor of Clinical Surgery and one of Clinical Medicine. Why does the branch of Laval, in Montreal, require more? We leave those better able than we are to give the answer.

#### UNIVERSITY OF LAVAL, AT MONTREAL.

##### FACULTY OF MEDICINE.

- P. Beaubien, M.D., Honorary Professor.
- P. Munro, M.D., Professor of Surgery and Dean of the Faculty.
- J. P. Rottot, M.D., Professor of Medicine and Clinical Medicine.
- E. H. Trudel, M.D., Professor of Obstetrics and Clinical Midwifery.
- W. H. Hingston, M.D., Professor of Clinical Surgery.
- J. G. Bibau, M.D., Professor of Anatomy.
- J. Emery Coderre, M.D., Professor of Materia Medica and General Therapeutics.
- H. Peltier, M.D., Professor of Physiology.
- T. E. D'Orsonnens, M.D., Professor of Chemistry, Medical Jurisprudence and Toxicology.
- A. T. Brosseau, M.D., Professor of Clinical Surgery and Operative Medicine.
- E. P. Lachapelle, M.D., Professor of Pathology.
- A. Lamarche, M.D., Professor of Histology and Pathological Anatomy.
- E. A. E. Desjardins, M.D., Professor of Ophthalmology, and Clinical Professor of Diseases of Eye and Ear.

- Angus C. Macdonell, M.D., Professor of Clinical Medicine.
- A. Ricard, M.D., Professor of Botany and Clinical Professor of Diseases of Children.
- A. Dagenais, M.D., Professor of Clinical Medicine.
- A. Laramée, M.D., Professor of Hygiene, and Clinical Professor of the Diseases of Old People and Venereal Diseases.
- G. O. Beaudry, M.D., Professor of Practical Anatomy.

#### SUCCESSFUL CASE OF TRACHEOTOMY IN DIPHTHERITIC CROUP.

At the meeting of the Medico-Chirurgical Society of Montreal, held on the 30th of Oct., last, Dr. John Bell read an account of a successful case of tracheotomy, the subject of which was a boy two and a half years old, rather delicate, who had a year before suffered from a severe attack of bronchitis, and who, at the time, was suffering from diphtheria. The boy began to be ill and feverish on the 20th September. Having complained of difficulty in swallowing on the 24th, his throat was examined, and white membranes were found covering both tonsils and extending up the pillars of the fauces. The treatment he was subjected to consisted of tincture of iodine locally, together with a sulphite of soda, sulphurous acid and glycerine wash, and also the administration of the citrate of iron and quinine. The extent of the diseased surface increased until the first of October, when dyspnoea began. Poultices were then applied to the throat and carbolized steam was constantly produced near the bed. His strength was kept up by means of milk, meat broths and brandy. On the 3rd the dyspnoea and cyanosis having become extreme, chloroform was administered and tracheotomy performed by Drs. Bell and Roddick. Respiration had ceased before the tube (Durham's) was introduced, but was soon restored by artificial efforts. The usual improvement in the color and appearance after the operation soon took place. The tube was kept free from blood and mucus, both by the vigorous blowing of the little patient and by the introduction of feathers. A stream of strongly carbolized steam was directed against a moist sponge placed over the mouth of the tube, and this was kept going con-

stantly until after the removal of the tube. The local treatment of the throat was continued until the membranous patches had entirely disappeared. On the 6th the tube was removed for the first time, and washed, the opening remaining patent in the meantime. On the 9th the patient was able, on the edges of the wound being held together, to force a small quantity of air through the larynx. On the 10th, considerable congestion of the back and base of the right lung was discovered, accompanied with blood-stained sputa. This, however, gradually resolved under simple treatment. The average range of the pulse, respiration and temperature during the time the tube was in the trachea was: P. 125, R. 34, T. 99.6. Nothing further worthy of note occurred in the history of the case. The tube was left out altogether on the 19th, after which the wound soon contracted and healed over, the voice also returning without any serious defect in character. Some irritability of the bronchial mucous membrane, especially on exposure to draughts, remained for some time. The boy has since remained well, and quite recovered his former degree of plumpness.

On the 10th of October, his sister, aged five, years, who lived on the same flat, took the disease in a well-marked form, and also his mother on the 15th, with severe initial symptoms. The little boy had a diphtheritic patch at one angle of the mouth, and the surface of the incision in the neck at first became covered with a thin greyish white layer. There seemed to be little or no septic poisoning of the blood, and no evidence of any paralysis has since appeared. That the case was one of undoubted diphtheria was not questioned by any of the members present at the meeting. The case is one of interest, not only from its result, but also from the fact that it is the first successful tracheotomy in diphtheria that has been performed in this city. The principal point of interest in the treatment of this case was the thorough use of antiseptics, particularly of carbolic acid in steam projected against the moist sponge covering the tracheotomy tube.

#### MARRIAGE.

In Montreal, on the 8th January, at the Church of St. James, by the Rev. M. Sentenne, Edmond Robillard, Esq., C.M., M.D., M.C.P & S., Q., to Miss Antonia A. M. du Mazuel.

## Original Communications.

*Remarks on Electro-Therapeutics, with cases, by DONALD BAYNES, M.A., M.D., L.R.C.P., E., Lecturer on Diseases of the Throat, Medical Faculty, University of Bishop's College. Read before the Medico-Chirurgical Society of Montreal, February 8th, 1878.*

MR. PRESIDENT AND GENTLEMEN,—In my paper for this evening, I propose simply to mention the different kinds of electricity; their different modes of application, and their uses as therapeutic agents. Also, to bring before your notice for discussion some of the cases I have had under treatment, hoping it may awaken fresh interest in this very valuable therapeutic agent.

### FORMS OF ELECTRICITY USED IN THERAPEUTICS.

1st. *Static or Frictional Electricity*—The electrical machine for producing this form is very simple, its essential parts being three, viz., the rubber, the rubbed body and the prime conductor, the rubber being usually a pair of leather cushions amalgamated with a paste made of zinc and tin turnings rubbed down with mercury and lard, the rubbed body, a large circular plate of glass, mounted on a glass axle, and turned by a handle between the cushions, and the prime conductor, usually an insulated metal cylinder intended to receive the kind of electricity required. This form of electricity is used for medical purposes in three ways, viz., the electric bath, electrization by sparks and the Leyden jar. The electric bath is of two kinds, electro-positive and electro-negative. The former increases the vital forces, the latter decreases them. In the electro-positive bath the electricity is gathered from the glass-plate on to the prime conductor, while the negative electricity is carried away by a chain from the cushions to the floor. The patient being placed on an insulated stool or chair, is connected with the prime conductor. The whole surface of the patient's body is thus charged with positive electricity, while the surrounding air is rendered negative. If the electric bath be given in a dark room a luminous appearance is produced by the escape of electricity into the air. The electro-negative bath is given in the same way, with this difference: the negative electricity from the cushions is collected, while the positive is liberated and carried to the ground by a chain. The electro-negative is said to have a weakening effect by reducing the natural elec-

tricity of the patient, acting like blood letting, the pulse being retarded.

These baths have been found useful in old standing ties, sciaticas, unpleasant flutterings about the heart depending on weak innervation, and tremor of the limbs have been removed, by simply charging a patient as it is called, even when the other forms of electricity have failed.

*Electrization by sparks.*—The patient is charged in the manner just described as an electric bath. The operator brings his hand near the patient, his hand becomes negatively electric. The negative electricity of the hand combines with the positive electricity of the patient; this produces a flash of light accompanied by a snap, and this is called the electric spark. These sparks may be drawn from the body by metallic conductors, and produce a sharp pricking at the part; if continued the skin becomes reddened, and white wheals are produced. At Guy's Hospital there is a chain or movable wire suspended from the ceiling and connected with the ground, to which is attached a brass ball which slides up and down the wire. This is brought close to the patient, about an inch from the spine; the patient is now charged, and the ball passed up and down in a line with the spine; sparks now pass to the ball and thence to the ground by the wire. In this way a rapid succession of sparks can be obtained. Cavallo has recommended the drawing of the sparks through flannel. If the sparks follow each other rapidly, they may cause slight vibration of the muscles which are close under the skin. This form has been used with success in paralysis, chorea, some kinds of amenorrhœa, and in some spasmodic affections.

The Leyden jar is charged as follows: you hold the jar by its outer coating, and bring the knob which is connected with the inner coating to the conductor of an electric machine in action. The inner coating becomes charged with positive electricity and the outer coating with negative. If these two coatings become connected, neutralization of the two electricities takes place, and the jar is discharged. For medical purposes it is used as follows:—A conductor communicates with the inner surface of the jar to the part to be electrified, the outer surface is connected to the opposite side, a spark is produced and the neutralization of the opposite electricities takes place through the part of



the body between the two conductors. This form is rarely used.

2nd. *The galvanic*, or as it is sometimes called *the constant or continuous current*.—This form is the result of chemical action, or rather decomposition, and is generated in a cell, battery, or pile, where two metals, an electro-negative and an electro-positive, are brought together in an exciting solution. This current produces no shock to the patient, unless broken or interrupted, which may be done either by the rheotome or by an interrupting handle. If weak, the current produces little or no pain; if, however, it be strong, it causes a tingling, burning feeling at the point of contact with the electrodes. If very strong, it becomes unbearable. The characteristics of this form of electricity are comparatively low "intensity" in its action on nerves and muscles, but a large amount of quantity. It produces results on temperature, chemical and thermic, far beyond static and Faradic electricity.

3rd. *Faradic Electricity*.—This form of electricity is of very high tension, having almost no chemical action or any direct effect on the temperature. It produces no burning or tingling as with the galvanic. It produces contractions of the muscles, and has a decided effect on the nerves of sensation and motion. It is an induced current and is of momentary existence, but these momentary currents may be repeated slowly or quickly. It exists only at the moment of making or breaking the galvanic current, or at the moment of making or unmaking a magnetic condition in a piece of metal. Having given a slight sketch of the various kinds of electricity, I shall now mention some rules on the modes or methods in which this remedy is used, as, without a proper knowledge of its administration, more harm than good may be done.

Rule 1st.—The positive pole is less irritating, we therefore place the negative pole in general faradization at the feet or coccyx, or at the pit of the stomach in central galvanization, the positive being applied to the head, neck, spine and other sensitive parts.

Rule 2nd.—In cases where the sedative effects of electricity are indicated, the positive pole is preferable, being less irritating.

Rule 3rd.—Where the stimulating effects are

indicated, use the negative pole as being the more irritating.

Rule 4th.—Dose of electricity, *i. e.*, the strength of the current and length of *séance*, depends greatly on the size and quality of electrodes, the method of application whether local or general. A short *séance* of general faradization or central galvanization will have a much greater general effect than a long *séance* of local electrization. If local, a short mild application to the head will produce results (whether beneficial or harmful) that would never occur in one ever so prolonged and strong to the extremities.

Now, not having any definite measure, we to a great extent depend on the sensations of the patient; (*i. e.*) if strong currents are borne without uneasiness they are indicated, if only mild ones are easily borne, use mild. A long *séance* with a mild current is much more beneficial than a short one with a strong current. Sudden shocks, especially with a strong current, often do harm. When using the galvanic current do not allow the electrodes to stay too long in one spot, or a tedious ulceration may be the result. The good effects of electricity may be roughly stated as follows:—

1st. Relief of pain.

2nd. Improvement in the pulse.

3rd. Do do temperature.

4th. Do do digestion.

5th. Do do nutrition.

6th. Increase of appetite.

7th. Quieting effect and tendency to sleep.

Gentle perspiration is an evidence of the proper application of electricity, but profuse perspiration shows an excess of irritation, and indicates that harm has been done instead of good.

If the current be too prolonged or too severe the patient is apt to suffer from disagreeable symptoms, (*e. g.*) dizziness, heaviness, oppression, headache, soreness, exhaustion, and a sort of undefinable nervousness. Messrs. Beard and Rockwell give a very exhaustive article in their work on the differences between the galvanic and faradic currents and the special advantages of each, from which I condense the following:

The advantages of the galvanic over the faradic are:

1st. "A greater power of overcoming resistance. It therefore affects the brain, spinal

cord and sympathetic more powerfully than the faradic; it is usually preferred when it is desired to affect the middle and internal ear, or the retina and muscles of the eye.

2nd. A power of producing muscular contractions in cases where the faradic fails. This is especially noticeable in paralysis, the muscles responding to galvanism when quite unsuspceptible to faradism. After treatment by galvanism the muscles often answer to faradism.

3rd. A more potent electrotonic, electrolytic and thermic action. The chemical power of the galvanic current is most markedly seen in galvano-cautery and electrolysis. Its greater catalytic action makes it superior in cases of neuralgia, atrophied muscles, rheumatism, etc.

The advantages of the faradic current over the galvanic are:

1st. By virtue of its frequent interruptions it more easily produces muscular contractions. This advantage is best appreciated in general faradization, the powerful tonic effects of which are largely due to the passive exercise and consequent oxidation and other important changes of tissue that result from the several thousand muscular contractions that take place during an ordinary sitting.

2nd. It produces greater mechanical effects. These are due to its rapid interruptions, not only on the muscles but also on the contractile fibre cells, thus stimulating the circulation and, with it, the process of waste and repair. In this respect its action is similar to rubbing, pounding, shampooing, etc. These mechanical effects are especially indicated in the treatment of diseases of the abdominal viscera, which are supplied with contractile fibre cells, anæsthesia, and general muscular debility, constipation, etc.

The general differential indications may be thus summed up.

*The Galvanic should be used:*

1st. To act with special electrotonic and electrolytic power on the brain, spinal cord, sympathetic or any part of the central or peripheral nervous system.

2nd. To produce contractions in paralyzed muscles that fail to respond to the faradic.

3rd. In electro-surgery to produce electrolysis or cauterization.

*The Faradic should be used:*

1st. To act mildly on the brain, spine, sym-

thetic, or any part of the central or peripheral nervous system.

2nd. To excite muscular contractions wherever the muscles are not so much diseased as to be unable to respond to it.

3rd. To produce strong mechanical effects.

The majority of cases, however, may be best treated, not by one current exclusively, but by both currents either in alternation or succession. The differential action of the two currents may be roughly compared with the differential action of bromide of potassium and chloral hydrate—the faradic current being the bromide of potassium, and the galvanic the chloral hydrate. Bromide of potassium is a safer remedy than chloral hydrate, but there are very many cases where it is powerless, and the chloral acts as a specific, so the faradic is safer than the galvanic, and therefore better adapted for general use, and, for those who use but one current, fulfills a larger requirement; and yet there are many cases where it fails, and the more powerful galvanic current is required. Except in cases where the galvanic current is clearly indicated, it is well to begin with the faradic—just as we use the bromide before resorting to the hydrate. A combination of the bromide and chloral is frequently more effective in producing sleep and relieving pain than when either remedy is used alone, similarly a combined or alternate use of the galvanic and faradic currents will accomplish much more than either used exclusively."

Faradic electricity has been proved lately to be very useful in arresting uterine hæmorrhages, as menorrhagia and post partum hæmorrhage. It has been lately much employed during labor for atony of the uterus, and has been successful in producing strong and regular contractions. This is a very great advantage, as it has no deleterious effect on the child, as is often the case where ergot has been employed. It has been strongly recommended as a means of resuscitating asphyxiated new-born infants, and in cases of drowning.

Electricity may be administered locally for purely local complaints. Where, however, a constitutional effect is required, the general faradization (for the faradic current) or the central galvanization (for the galvanic current) introduced and fully described by Messrs. Beard and Peckwell must be employed.

### *Localized Electrization.*

The object of localized electrization is to confine the direct action of the current, so far as possible, to some particular part of the body. This is accomplished by placing electrodes so that the current in passing from one to the other shall chiefly traverse only that particular part that is to be affected.

There are two general methods of localized electrization—*direct* and *indirect*: Direct where the application is made over the muscle to be excited; indirect where the application is made to the nerves supplying the muscles. In the former, large electrodes are used; in the latter, small pointed ones. The faradic is best for direct; the galvanic, for indirect. In stable applications the electrodes are kept stationary, in labile, one or both electrodes are moved over the surface.

### *General Faradization.*

The object is to bring every portion of the body under the influence of the faradic current, so far as is possible, by external electrization. This is best accomplished by placing one pole (usually the negative) at the feet or the coccyx, while the other is applied over the surface of the body.

### *Central Galvanization.*

The object here is to bring the whole central nervous system, the brain, sympathetic and spinal cord, as well as the pneumogastric and depressor nerves under the influence of the galvanic current. One pole, usually the negative, is placed at the epigastrium, while the other is passed over the forehead and top of the head, by the inner border of the sternocleidomastoid muscles, from the mastoid fossa to the sternum, at the nape of the neck and down the entire length of the spine.

I will now say a few words about the electric bath, as introduced and perfected by Dr. Schweig, which combines all the advantages and benefits to be derived from the various methods of applying electricity, and, in addition, gives the patient the benefit of the warm bath. The good results following the use of the electric bath have, in my experience, far surpassed those of any other mode of application. The bath is made in the form of the ordinary zinc washing baths found in most houses. It

is, however, made of wood, slate, marble, or hard rubber; wood is, of course, the cheapest. At the head and foot of the bath carbon plates are let into the wood; these plates are connected by means of a copper wire, which runs along a groove let in the head and foot pieces of the bath to the coping where it communicates with two binding screws, one at the head and the other at the foot of the bath. When a bath is given, a wire is connected from either pole of the battery to the binding screws. If the conductor from the positive pole is connected with the binding screw at the head board, and the negative with that at the foot, we get a descending current. Where an ascending current is required, the reverse of this must be carried out. If we require to localize the current in special parts of the body from one of the poles, what is termed a surface board is used; this is a piece of board about 14 inches long, 5 broad and  $\frac{3}{4}$  thick, having a bed cut in it large enough to receive a carbon plate, 5 inches long, 2 wide and  $\frac{1}{4}$  thick; through the centre of this board a metallic binding screw is introduced and brought into connection with the carbon, and to this binding screw is attached a piece of insulated wire, which may, as required, be attached to either conducting wire from the battery. The current is said to be centripetal when the surface board is connected with the negative, and centrifugal when connected with the positive pole. The average duration of the bath is about twenty minutes, though the time may range from ten minutes to an hour and a-half. The temperature of the bath may range from 85° to 100° or 105° Fahr. Certain chemicals may be introduced into the bath, which will, under certain conditions, enhance its effect. Iron (tart. of iron and ammonia) is useful in anæmia, chlorosis, etc. Iodine, either as tincture, or in the form of iodide of potassium, is very useful in the absorption of plastic exudations, articular deposits following rheumatism and gout, also in the elimination of lead, in cases of lead poisoning: in these cases about an ounce of iodide of potassium is added to each bath. Extract of malt alone, or in conjunction with iron, has been found very useful in cases of malnutrition and debility. If we wish to obtain counter-irritant effects, mustard or common salt may be added. To render the bath alkaline in some cases of skin diseases add bi-carbonate of

potash, or soda; starch is sometimes a useful adjuvant to the potash or soda.

The general therapeutic effects and uses as described at length by Dr. Schweig may be summarized:

1st. Its value as a diagnostic. — The current makes itself more decidedly, and often even painfully felt, in any part where a morbid condition exists, whether this be of an inflammatory, neuralgic, rheumatic, traumatic, congestive or other nature. It may be compared to tenderness on pressure. In anæsthesia the current makes itself conspicuous by the absence of its normal effects.

2nd. It is an excellent counter-irritant. The amount of counter-irritation can be regulated to a nicety by the intensity of the current. After a bath the back and legs are seen to be quite red. Concentrated local counter-irritation can be obtained by the use of the surface board.

3rd. As a general invigorant and tonic it can have few, if any, superiors. In cases of debility, mal-nutrition, want of energy, etc., the tonic effects are striking and brilliant.

4th. It has great powers as a hypnotic and general sedative. The greater the degree of restlessness, irritability or wakefulness, the more strikingly does the soothing and hypnotic influence of the baths become apparent.

5th. Improved nutrition, as manifested by rapid increase of weight, is a reliable and constant effect of the bath.

Among the diseases that seem to be specially amenable to this form of treatment may be mentioned:

1st. Rheumatism, sub-acute and chronic, with their sequelæ.

2nd. Chorea, or St. Vitus' dance.

3rd. Hysterical affections.

4th. Nervous exhaustion.

5th. Insomnia (sleeplessness).

6th. Anæmia (the cause of numerous morbid conditions).

7th. Paralysis (here very specially the beneficial effects of the bath have been amply proved.)

8th. Many forms of neuralgia.

9th. Articular effusions.

10th. Impotency.

11th. Dyspepsia, constipation and chronic diarrhœa.

12th. Some forms of metallic poisonings, as lead, mercurial, etc.

13th. Very useful in convalescence from acute diseases, chronic headaches, hay fever, uterine and special female complaints.

I will now conclude by mentioning a few cases selected at random from my case book.

*I. Hay Fever.*—This most trying complaint may be very greatly alleviated, if not altogether cured, by a proper administration of electricity alone; or, when indicated, assisted by medication.

Mr. H. entirely escaped his usual attack during the past summer, having at my advice undergone a systematic course (chiefly of general faradization) during the summer months. He assured me that, in addition, he felt much stronger and more able for his work. The last summer is the first for many years he passed in Montreal, having been usually obliged to spend June, July and part of August either at the sea-side, or at one of the mountain retreats frequented by victims of hay fever. I may mention here that I was successful during the past season in cutting short, or modifying in several instances severe attacks of this disorder. Some were treated by central galvanization (as recommended by Dr. Beard in his book on hay fever), others by the electric bath.

*II. Aphonia.*—Miss G. B., aged 18, came to me in April, 1876. Had been in somewhat a debilitated condition for some time, menses irregular, bowels very constipated. About three months previous to her visit to me she had caught a severe cold, which resulted in complete loss of voice, so much so that she carried a slate and pencil as a means of communication. A laryngoscopic examination revealed paralysis of the vocal cords; on attempting to phonate, the right remained completely motionless, and the left did not quite approach the median line. I applied one pole of a faradic battery to the "pomum Adami" by means of Mackenzie's neck-let, and the other directly to the vocal cords by means of Mackenzie's laryngeal electrode. The effect was instantaneous, her voice being completely restored. I then ordered her a tonic containing iron and nux-vomica, and she shortly regained good health.

Miss S., 23 years of age, a saleswoman in a shop, consulted me in June, 1877, for a functional aphonia following a severe cold. In this case

there was a good deal of congestion of the cords. I applied electricity, as in the former case. After the first application her voice was somewhat restored. I touched the cords with a solution of chloride of zinc 3 ss. to the 3 i; and gave her a benzoin inhalation. The following day the congestion was a good deal less. I again applied the electricity, and repeated the zinc solution. In less than a week her voice was quite restored, and has remained strong up to the present time. I may mention that in the former case the young lady had been very actively treated by means of applications of nitrate of silver, mustard plasters, iodine inhalations and purgatives *ad libitum*.

*III. Chorea.*—In 1874 I saw a case treated by means of the electric bath. The child, about 10 years of age, was brought to Mr. Adolphus, proprietor of the Queen's hotel electric baths, and so bad was the case that a bag had to be made into which the child was placed, and the bag tied round the neck so that it could not hurt itself against the sides of the bath. The improvement was rapid, the contortions being much less even after the second bath. In less than a month the child was perfectly cured.

*IV. Lumbago.*—Col. B., consulted me in June, 1875, for lumbago. He had been suffering nearly a week, and was scarcely able to cross the room, so great was the pain. I applied the galvanic current for about 15 minutes over the lower part of the spine and thighs. This application gave great relief. I repeated the galvanism next day. He was now so much improved that he could walk with a stick; three more applications so completely cured him that he was able to take his daily ride and walk without any pain or inconvenience.

Mr. D. had been troubled for some time with aching pains in his back. He had tried the usual remedies without much, if any, benefit. He was recommended to try the electric bath, and for that purpose came to me in September, 1877. He took in all four baths, marked improvement followed the first bath; and he declared himself to be perfectly free from pain after the third. He has had no return up to the present time.

*V. Deficiency of Secretion of Milk.*—Mrs. H. consulted me in February, 1877, about the entire absence of milk in her right breast. This was the third time she had lost the milk in this

breast, the result of previous abscesses; three applications of the faradic current resulted in as full a supply of milk as in the other. I may mention here that the galvanic current is very efficacious in curing sore nipples.

*VI. Paralysis.*—1. James L. fell, September 8th, from a window in St. Catherine street, some 20 feet from the ground, striking the left side of his head. The child was taken up insensible; pupils dilated. Ordered grs. x of calomel, followed by an injection, and hot cloths to its head. As the child seemed in great pain, and kept crying continually, I gave it small doses of tr. of opium. On the ninth child was quieter; ordered another injection and ice cloths to the head. On the twelfth the child became sensible. It was now noticed that he was unable to speak, and that its leg was paralysed. There was a good deal of anæsthesia in the paralysed limb; no response to the faradic current. *Treatment.*—Daily applications of both galvanic and faradic currents. Sept. 21st, able to stand; 22nd, speech returned; 23rd, walked alone; 26th, able to run a little; dismissed, cured, the first week in October.

2. Frank M., 14 months old; strong, well-nourished child, sent me by Dr. Kennedy. First seen, September 24th, '77, left leg was paralysed, muscles flabby, limb was always cold, and smaller than the right. Previous history: Sept. 14th, child woke up, crying, after its morning nap; was very feverish and vomited several times. The mother gave it a dose of oil; towards evening child seemed better. The next day the mother noticed the child's leg was paralysed. Supposed cause of the paralysis was cold, as the child was sitting on damp grass the day before its illness. There was no response to the faradic current. *Treatment.*—Galvanic current, positive pole to the lower part of the spine, negative applied to the entire length of the limb. Early in September the muscles began to answer to the faradic current; a fair return of sensation; temperature of the limb better. Continued galvanism, and, in addition, gave faradic baths. In October the leg had increased in size, and was easily kept warm. The child now began to move the leg, and was able to creep and stand in November. December, leg same size as right; temperature good; able to walk short distances; dismissed, cured, towards end of December.

3. Miss M., aged 24. She had been in the habit of taking Epsom salts daily for more than



a year. Caught a severe cold towards the end of December, '77, which resulted in spinal congestion, for which she was attended by Dr. Roddick, who sent her to me Dec. 13th, 1877, for electrical treatment. She was then complaining of numbness of both legs, (the numbness extended as high up as the lumbar vertebrae,) weariness on the slightest exertion, and considerable difficulty in locomotion; appetite bad, bowels constipated, feverishness and restlessness at night. Treatment, electric baths, 15 to 20 minutes with the galvanic current, followed by 10 minutes with the faradic. She took in all six baths, one every other day, when she returned cured to her occupation as saleswoman in a shop.

*VII. Post Partum Hæmorrhage.*—1. Dr. Geo. A. Baynes has furnished me with the following case: Called to see Mrs. D., a thin delicate woman. She had been in labor for some 19 hours. On examination found the os uteri fully dilated, head presenting, the anterior diameter somewhat shorter than normal. Her pains were very feeble and far between, seemed very low. I gave her two or three doses of fluid extract of ergot which produced little or no effect. I then applied the forceps and delivered the child; the placenta came away. Shortly after severe hæmorrhage set in, the uterus failed to contract under the application of cold, ice, etc. Mrs. D. fainted. I had sent for my battery, which now arrived. I gave the nurse one pole to apply over the abdomen, and taking the other in my hand passed it into the uterus, which immediately answered to the stimulus and contracted firmly. I withdrew my hand and applied both poles for a few minutes to the abdomen over the uterus. There was no recurrence of the hæmorrhage, and the uterus remained firmly contracted.

2. Dr. Perrigo sent me the notes of the following case: Was called by Madame Fuhrer to see Mrs. S. The labor had been an ordinary one; however, soon after the removal of the placenta, flooding set in. Ergot had been given and ice had been introduced into the uterus, but without the effect of producing permanent contractions. On my arrival I found the patient much exhausted; exsanguine, and the uterus was relaxed. I immediately applied the faradic current to the abdomen over the uterus, this was followed by a temporary contraction. The

uterus, however, again relaxed. I now introduced one pole into the uterus itself and applied the other to the abdomen, this resulted in the uterus becoming firmly and permanently contracted. The woman made a good recovery.

*VIII. Atony of Uterus.*—Dr. Geo. A. Baynes gave me the following notes of one of his cases:

Mrs. D. M., aged 34; small and rather delicate woman; former confinements tedious, owing to the want of regular and strong pains. When called in on the present occasion I found the os uteri fully dilated, and the head well advanced; nothing seemed to be wanting but a few good expulsive pains. She had been in labor for many hours. Her pains were feeble, recurring at long intervals. I determined to try faradization, and applied a medium current for about two or three minutes. I then waited for four or five minutes, and again applied the faradic current. The uterus began to respond to the stimulus, and acted strongly and regularly; a few minutes afterwards the child was born. The woman made a good recovery.

In many uterine irregularities and troubles electricity has proved to have been of great value.

I have had very favorable results from its use in neuralgic dysmenorrhœa, amenorrhœa, etc.

*IX. Toothache.*—I have several times afforded great relief by placing a needle connected with the negative pole of a galvanic battery in the hole of the carious tooth, the positive being placed on the cheek and passing a gentle current through for a minute or two. Two or three applications, allowing a few minutes rest between each application, will, as a rule, cure the toothache. The patient will not be likely to suffer from a return for some weeks, or months.

*X. Debility.*—Mrs. F. L., married, suffering from obstinate constipation and severe leucorrhœa, had, from over-nursing, fallen into a very low, depressed and nervous state. She told me she felt thoroughly unfit, mentally as well as physically, either to read, write or attend to the ordinary duties of the house. She had gone through the usual routine of tonics before I saw her. I began treatment with the electric baths, in April, 1877. After the third bath she began to improve, and in June, 1877, was dismissed cured. She was then able to take long walks,

two or three miles; had quite regained her mental vigor.

J. B., clerk, aged 45, consulted me in July, 1877, for debility and cough. Previous history, had been some years in India, where he had suffered from various malarial fevers, etc. During the winter of 1877, he had a severe attack of typhoid fever. He was hardly convalescent when he was again laid up with an attack of pneumonia. On his recovery he went away for change of air, and to a certain extent regained his former strength. The office work, however, soon began to tell, and when he came to me in July, he was very thin, had considerable stoop, a trying cough, moist rales which were distinctly heard while talking to him. His appetite was bad, and on his return from office used to throw himself down on the sofa and lie there till he went to bed. I gave him electric baths, one every other day at first, then one twice a week, and lastly, one a week. He took, in all, about 18 baths. His appetite began to improve after the first bath. After he had taken three, he told me his cough was nearly well, and his energy for work was much better. His improvement was very rapid. After he had finished his course of baths he said he was stronger and in better health than he had been since his Indian service.

I could go on multiplying case upon case, were there necessity, where I have used electricity with benefit. I have not touched upon the use of electricity in cancer, nor its electrolytic action in tumours, nor galvanic cautery, upon each of which a long paper might readily be written.

Finally any one who knows anything of the action and effects of electric baths on the following conditions, will at once acknowledge their great use, viz.: astheniæ, debilitated conditions generally, convalescence from acute disease, many kinds of chronic headaches, various conditions of marasmus and malnutrition, &c.

In conclusion, I would recommend any who may wish to try electro-therapeutics to be careful in the selection of their batteries. I have tried a great many, English, French and American, and must in fairness say that those manufactured by the Galvano-Faradic Mfg. Co. of New York have given me the greatest satisfaction. They are perfectly reliable if properly

looked after, convenient in size, reasonable in price, easily managed, simple in construction and handsome in appearance.

*Diphtheria attacking the Funis Umbilicalis.* By  
THOMAS A. RODGER, M.D.

Having heard a few of the members of the profession give expression to doubts concerning the contagiousness of diphtheria, in fact, boldly declaring that the disease was not communicable by actual contact, I would beg leave to bring to notice the following case as being one fully illustrating that the disease is contagious. We read of this affection attacking locally different parts of the body, the mucous membrane of the mouth and nose, the pharynx and larynx, and also open wounds; but I have not yet heard of there having been a case of genuine diphtheria attacking the "funis umbilicalis." The present outbreak among us of diphtheria would seem to have made itself manifest, more particularly among children of age ranging from three to twelve years. But what I wish more particularly to notice is that younger children, infants, in fact, are not exempt, notwithstanding that we are led to believe to the contrary, for Oertel tells us that the infant organism seems to be not at all susceptible to the disease.

On the 15th of November, 1876, the subject of this case was born, a strong, healthy looking child. Being in attendance at the confinement, I was making my usual visit on the third day, when the nurse informed me that the child was ill, that it had been fretful and restless all the night, and had refused the breast, notwithstanding that up till this time there had been no trouble. A dose of castor oil had been given and had operated well.

Our attention is apt to be drawn so frequently to such cases, and usually about such trivial affairs, that I contented myself with ordering some simple carminative, with instruction, that if the case got worse, to make it known to me. I heard nothing further until my visit on the following day, when I found the case no better. Passed the night very restless, still refusing the breast; temperature, 102°; breathing hurried; pulse, frequent; in fact, great excitement of the whole nervous and circulatory system, such as you expect as the approach of some form of the exanthemata.

I had the infant undressed and found in the immediate neighbourhood of the funis a highly erythematous condition, and quite firm to the touch. On removing the portion of linen contain-

ing the cord, rather a strange sphacelous-looking mass presented itself, in circumference about the size of a twenty-five cent piece, about a quarter of an inch in thickness, and of a greyish yellow colour, but no perceptible odour. The mass seemed to spring from the connective tissue, and could be raised quite freely from the surface of the abdomen, the cord itself could be seen projecting from the centre.

I was indeed at a loss, just at the moment, to know what condition of things I had to deal with, for it must be borne in mind that at this time diphtheria was of rare occurrence. On reaching home it occurred to me that I had seen a case of croupous diphtheria in that same terrace of houses a short time previous, consequently I returned to the patient and carefully examined both throat and nostrils, but no trace of disease was discernible. The next question was, how came this condition of things? On enquiring, I ascertained that the person who had washed the infant, and had also wrapped up the cord in the portion of linen, was the same individual in whose house the case of diphtheria had occurred two weeks previous. This, I felt satisfied at the moment, was the probable source of contagion, and time would, in all probability, confirm the diagnosis that the case was diphtheria. Beyond cauterization, and the application of some acetate of lead lotion, nothing further was done, as it was painfully evident that the case was hopeless. Early the following day I was summoned to see the child, but only to witness, what very shortly transpired, viz., death by septicaemia. In confirmation of the diagnosis in this case, the disease appeared two or three days later, in two other members of the same family, aged respectively three and a half years and six years, the former having a pretty severe attack, followed by general paralysis, which, in course of time, yielded to appropriate treatment.

Point St. Charles, Montreal, Feb. 2, 1878.

## Progress of Medical Science.

### CLINICAL LECTURE ON FRACTURES OF THE FEMUR.

Delivered at Bellevue Hospital, N. Y., Nov. 7, 1877. By  
FRANK H. HAMILTON, M.D. Reported by P.  
BRYNBERG PORTER, M.D.

GENTLEMEN,—On entering upon my term of service at the Hospital on the 1st of the month, I found ten cases of fracture of the shaft of the femur in the wards. A number of these I propose to bring before you to-day; but, in order that you may properly appreciate the principles involved in

their treatment, it will be necessary for me first to call your attention briefly to the progress which has been made in the treatment of this class of fractures during the last hundred years. My remarks, you are to understand, will be limited exclusively to fractures of the shaft of the femur, and will be still further limited to fractures of this character occurring in the adult. In fractures of the thigh in children there are material differences, to which it will be impossible for me to allude, for lack of time, on the present occasion.

In the first place, I wish to remark that fractures of the shaft of the femur in the adult are almost invariably oblique,—not moderately so, but extremely oblique, as a general rule. It is, therefore, impossible to make the fragments set, in the ordinary acceptance of the term; and they can only be maintained in position by extension and counter-extension. The powerful muscles attached to them necessarily make them overlap each other, giving rise to the hideous deformity which is seen in the two specimens that I now show you. In such a case the bulging noticed is always equal to twice the thickness of the shaft, even if there should be no callus to make it still greater. This, then, is the beginning of our study of fractures of the femur: they are oblique.

Now, how is this powerful action of the muscles of the thigh, causing the fragments thus to override, to be counteracted? Until the latter part of the last century (from the remotest periods, as far as we have any knowledge), surgeons were in the habit of employing a simple long straight splint. By making extension and counter-extension they pulled the fragments out into position, and then applied the splint to the side of the limb with bandages. Such a long splint I now show you, and this particular one was handed to me by one of the surgeons in Stonewall Jackson's army, where he was frequently obliged to have recourse to it. Towards the close of the eighteenth century, however, Pott wrote a short treatise in which he showed that there had always been considerable shortening after fractures of the thigh, explained the reason why this was so, and contended that the muscular contraction giving rise to it could be overcome by keeping the limb in a flexed position and thus relaxing the muscles. This publication made an immense impression in the medical world, and, as a consequence of it, the double inclined plane came into general use in the treatment of this class of fractures, both in England and America; though it was never adopted by the French and German surgeons. The theory was specious, but unsound. It has its advocates even up to the present day, however, and a few leading surgeons in this country, among whom I may mention the distinguished Nathan R. Smith of Baltimore, still prefer the double inclined plane to any other method of treatment.

Almost the entire surgical world, however, has returned to the use of the straight splint; but very important modifications have been made in it. The first of these was introduced by Boyer, and

since his time almost innumerable devices, some of which I show you here, have been suggested in connection with it. Most of the modifications involved some form of screw by which extension could be made, and also some appliance for making counter-extension. The way of getting hold of the foot in order to keep up extension was a very important matter, and always gave a great deal of trouble. A few of the various devices which have been suggested I now exhibit to you. They are all apparently good; but, however carefully the foot-band might be padded, they all invariably caused excoriation and ulceration when any considerable traction was maintained for any length of time.

As to the matter of counter-extension, that was almost exclusively made by pressure upon the perineum, where the tuberosity of the ischium was the *point d'appui*. The best of all these appliances was the flat perineal band, on account of the comfort with which it could be worn by the patient. But what has been the history of these? Every old surgeon can recall a number of cases, especially where the patients were delicate females, in which a deep ulceration resulted from the pressure made by the perineal band.

It will thus be seen that surgeons labored under two great difficulties, viz., in the way of making suitable extension and suitable counter-extension by means of the extending band and the perineal band. In actual experience it was found to be altogether unsafe to employ a traction force of over ten pounds, and this was usually quite insufficient for the purpose required.

It is to the late Dr. Crosby, of Hanover, New Hampshire, that the honor must be given of having made the first great step in the improved treatment of fractures of the femur. About twenty years ago he conceived the happy device of applying strips of adhesive plaster to the sides of the leg for the purpose of making extension, and by this means we are now enabled to employ with impunity a weight of twenty-five pounds, if necessary. This was indeed a great triumph. For the next great step in the treatment we are indebted to a surgeon of Schenectady, to whom it occurred that the necessity of having a perineal band might be obviated by elevating the foot of the bed. When this was first suggested to me it was thought to be necessary to have the foot of the bed raised about two feet from the floor, and in the first case in which I made use of the plan the patient complained that he felt as if he was going to have apoplexy, from the tendency of the blood to flow to the head. I was not, therefore, very favorably impressed with the idea; but the method was taken up with enthusiasm by Dr. Moore, of Rochester, and, as it was before long demonstrated that it was only necessary to elevate the foot of the bed four inches, the measure was adopted by almost all surgeons, and the perineal band was soon abandoned altogether. It is now many years since I have seen a perineal band in use in this hospital. One caution I will mention in raising the foot of the bed from the floor. It is

always necessary to have the pillow under the patient's head alone; for if it is under the shoulders also, instead of having the whole body act in the way of making counter-extension, you will only have the portion from the pelvis down.

Thus, then, you see, we have at our command reliable means for both extension and counter-extension without causing inconvenience or injury to the patient. But in making extension we are not able to go beyond twenty-five pounds' weight, for the reason that the ligaments about the knee-joint become painful when a traction-force exceeding this is applied. You know that in standing, however erect, the knees are never kept perfectly rigid and straight, but are always flexed to a slight extent; and if a greater weight than twenty-five pounds is employed when the body is in a recumbent position, the strain upon the ligaments soon becomes unbearable. Twenty-five pounds is the maximum weight to be used, and is ample for all practical purposes. Oftentimes a considerably smaller weight is quite sufficient; and my rule is gradually to increase the amount of extension until the patient cannot bear any more with comfort.

To the Germans we are indebted for many important advances in both medicine and surgery; but in one instance the American surgeons followed the teachings of the German authorities and went a step backwards. This was by the adoption of the plaster-of-Paris bandage in the treatment of fractures of the femur. At first it was supposed to be necessary to make counter-extension by pressure upon the perineum, and, as a consequence of the plaster treatment with this in view, I have seen an enormous ulceration result, extending for several inches around the perineum, and as deep as my hand. When this idea was abandoned, the attempt was made to obtain counter-extension by means of the large muscles upon the back of the upper part of the thigh; but in a person of small muscular development this was utterly impossible to do, and in any case the plaster application soon became so loose as to be utterly valueless in this respect. In this hospital I saw more shortening and more crooked limbs after fracture of the femur, while the plaster treatment was employed, than I ever saw before or have ever seen since. What is more, I saw three deaths actually result from it, and these have been carefully recorded in the latest edition of my work on Fractures and Dislocations. I tell you, gentlemen, the introduction of this treatment was not one step, but several steps, backwards. I do not speak from mere hearsay, but from actual experience; for for three or four years I treated every alternate case occurring in my service with the plaster bandage, and I always observed the result accurately. Now, I am happy to say, the method has fallen into general disuse here, almost all of my colleagues in the hospital having abandoned it. If you attempt to employ it in country practice, I feel quite sure you will give it up too, after having made trial of it about twice.

Now we are prepared to look at some cases in process of treatment; and in the first one which I show

you, you will observe that no side-splint is employed. This is sometimes unnecessary, but in many instances it forms an essential feature of the treatment. Instead of one pulley and one weight, there are two of each—the two cords extending from each side of the foot-piece. This modification was suggested by Dr. Monroe, of the House staff, with the idea of preventing external rotation of the limb; and it does accomplish this to a certain extent. In this case, a plaster-of-Paris bandage has been applied over the adhesive strips, in order to keep them more firmly in position.

In the second case before you, there is also no side-splint, as you will perceive, and rotation is guarded against not only by having two weights and pulleys, but also by a little apparatus contrived by Esmarch. This consists of a cushion on which the foot rests, and which is fastened to a wooden cross-piece for the purpose of holding the limb steady, and the cross-piece is movable upon a frame when the position of the foot is changed. We have, however, a simpler means, I think, of accomplishing the same result in a better manner, and this I will show you presently. In this case, silicate of sodium instead of plaster-of-Paris, as in the last, is applied over the adhesive strips upon the leg. The patient has now been under treatment for more than seven weeks, and yet I am still able to detect a little crepitus at the seat of fracture. As he is a young man and apparently in good health, the process of repair would seem to have been going on rather slowly; but I have no doubt that a good result will be obtained in the end. In my forty years and more of practice I have never had a single case of non-union occur in my own hands, and I have certainly treated a pretty large number of these fractures; though I have seen some in consultation. I do not say this in any spirit of boasting; but such has been my good fortune.

I now pass to the third case, the treatment of which is a typical example of what is known as Buck's method. Dr. Buck has done a great deal for the treatment of these fractures, but the various improvements which have been adopted in its most improved form have been suggested by so many surgeons that I think it is hardly just that it should be called by his name, and I would suggest the "American plan" as a more appropriate title. You observe its prominent points: the long splint with its lower extremity fitted into a light wooden framework to hold it steady, and its upper portion bound to the side of the chest by a wide roller-bandage; the foot-piece (to which the weight is attached by the cord passing over a pulley) sufficiently wide to prevent any pressure being made upon the external or internal malleolus; the adhesive strips extending up to the knee, and covered by a roller to keep them in position; the four short side-splints about the thigh, covering the seat of fracture; and, lastly, the foot of the bed elevated four inches above the floor, for the purpose of making counter-extension. The adhesive plaster should not pass above the knee, for if it reaches higher than that, it will be likely to do more

harm than good, by involving some of the muscles which are attached to the upper fragment of the femur. For the four independent side-splints, within the long one, we are now in the habit of using felt, because it is a light material, and when once moulded to a part retains its shape permanently. They are kept in position by a bandage, and can be removed at pleasure for the purpose of examining the seat of fracture, or for any other reason that may necessitate it. They are extremely useful in preventing looseness of the limb. As a general rule, I regard the long splint as the most essential requisite for making a straight thigh, and it acts in two ways: *first*, by preventing eversion, and *second*, by keeping the whole body straight. In its simplicity and efficiency it is far superior to the plaster-of-Paris bandage. Theoretically, the latter, after being once applied, is supposed to remain *in situ* until the case is discharged cured; but practically it is found to get loose in a week, and in two weeks it becomes positively necessary to remove it and apply an entirely new dressing, which involves no inconsiderable amount of labor. This, of course, has to be repeated about every fortnight until the end of the treatment. Here is a little boy upon whom the plaster was applied only a few hours ago, and, though it was very carefully and thoroughly done, you will observe that I can already get my hand underneath the part of the bandage which passes around his body. In the course of a week the whole will be so loose as to be of no practical use whatever.

In all the cases which I have shown you there will probably be some shortening, varying from three-eighths to one-half of an inch; for in fractures of the femur more or less shortening is the rule, and not the exception. Some writers would have us believe that naturally in about every third man one lower extremity is longer than the other; but this is certainly not the case, for were it so this disparity would very frequently be corrected by the occurrence of a fracture. In reality, however, I find, that in about nine out of every ten cases one limb is slightly shorter than the other after my treatment for fracture.

The next case which I shall shew you is a young man who has had one of his thighs fractured twice. The first time he was treated by some other surgeon, and the last time by myself, quite recently, at St. Francis' Hospital. It is necessary that we should be very accurate in making measurements after fractures of the femur; and my method is as follows: Placing my thumb-nail upon the ring of the measuring-tape, I do not put it directly upon the anterior superior spinous process of the ilium, but underneath the latter, upon the tensor vaginæ femoris muscle, and then press it firmly up against the bone. The lower end of the tape is now passed to the external malleolus, and in the case before us I find that the limb which has sustained the two fractures measures thirty-four inches, while the uninjured one measures thirty-four and a half inches.

The patient tells me that a day or two ago, while making unusual muscular exertion, he heard some-



thing crack, and experienced a sensation of pain and weakness at the seat of the recent fracture. This was no doubt due to the fact that the callus, being still new and tender, gave way to a certain extent; and it will be necessary for him to remain perfectly quiet for a few days, in order that firm union may again occur in it.—*Phil. Med. Times.*

#### ON THE MANAGEMENT OF THE NIPPLES.

Dr. Samuel Sloan, Assistant Physician-Accoucheur to the Glasgow Lying-in Hospital, describes (*Obstetrical Journal of Great Britain*, Jan., 1878) his treatment of sore nipples as follows:—

My plan, when the nipples have unfortunately felt sore, is to carefully wash off the milk, after the child quits the breast, with tepid water; then to wash the nipple with weak spirit lotion and glycerine to prevent drying; or, if the excoriation should be more advanced, some astringent is added, as tannin or a weak solution of nitrate of silver. To protect the nipples from friction against the dress, *if the part be not inflamed*, I order a properly constructed nipple-shield, and occasionally apply a mild ointment, as oxide of zinc, to protect the skin from the repeated application of the watery solutions. If the nipple be retracted, or in any way difficult for the infant to seize, I advise that it be gently drawn out by the breast-pump, of which the best is the green ball breast-exhauster; and, if still painful when the child is applied to the nipple, an artificial glass nipple with India-rubber teat must be *at once* applied. Of this latter apparatus I would add that it is of the utmost importance to secure one of a proper shape; as, if too narrow, constriction of the nipple takes place, causing occlusion of the lactiferous ducts; and, if too long, so much of a vacuum is produced between the extremity of the nipple and the mouth of the child that it is generally impossible for the child to draw the milk into the teat. The teat also ought not to be long, as it then only serves to tickle the fauces or the child. It is thus an important matter, in ordering one of Maw's glass nipple-shields, to secure a proper fit for the particular case: as it is advisable that the child's temper should not be tried in vain attempts to extract the milk. Besides this the teat ought to be carefully cleansed from the composition which covers and impregnates it, as the smell and taste of this material may disgust the child so much that it may refuse to make another attempt. This unsavoury material may be removed by soaking the teat in whisky and then washing it. Before applying the child to this artificial nipple the latter ought to be filled with some of the mother's milk; or, if this is not practicable, with sweetened milk and water. Some children take so kindly to this artificial nipple that it is

difficult, after being long accustomed to it, to persuade them to use the mother's nipple again. But, should only one nipple be affected, this will not readily happen, *especially if the artificial teat be small enough*. Of artificial nipples there is a great variety, but to me the one described above and sold by Maw seems to most efficiently protect the nipple; though the shield and teat in one piece, made of India-rubber or other soft material, as softened ivory, will make suction easier for a weakly child, if it can be borne by the mother. There is, however, with its use considerable compression of the nipple by the child's gums. A good artificial nipple has yet to be devised. If the nipple-shield can be borne, and the child can be coaxed to use it, there will be little difficulty in curing the nipples on general principles. In the event of excoriation of the nipple continuing after this attempt with the artificial nipple, and ulceration setting in, there remains no course but to take the child at once from that breast till the part is sufficiently restored to permit of its reapplication. And here the careful use of a good breast-exhauster is important. For, should the breast become engorged whilst the nipple is tender, there is every prospect of abscess of the breast taking place. In my experience, no matter how tender the nipple may be, a careful regulation of the compression of the ball by the hand, with occasional relaxation of the nipple to prevent occlusion of the lactiferous tubes, will always result in the almost painless removal of the milk; though, should the breast be hard and yet no milk come, gentle friction at the periphery of the breast may be required to expel the milk from the gland proper into the lactiferous reservoirs under the areola, whence the breast-exhauster will readily withdraw it. It will now be a comparatively easy matter to heal the nipple, since the first step in treating a disease is to remove the cause; the impracticability of doing this rendering the treatment of the nipple so unsatisfactory. If there be ulceration, careful washing and drying of the nipple, and the application of solid nitrate of silver *to the part affected only*, will generally suffice. This treatment by a "tough caustic point" is, when combined with the use of the nipple-shield, a certain cure of the fissures which occur around the base of the nipple. If the part be inflamed, sedative applications or poultices will of course be the first indication. Should the affection of the nipple arise from the aphthous condition in which we sometimes find the child's mouth, the application of borax and glycerine, or chlorate of potash dissolved in glycerine, is the proper treatment for the nipple as for the mouth. I think it wise to avoid, in the selection of remedies for the nipple, any medicine which may injure the child, if sufficient care be not

taken in its removal before the next application of the child to the nipple. Perhaps it may suffice to point out, regarding some recent investigations which have been made as to the quality of the milk as a factor in the production of sore nipples, that, where one nipple only is affected, this condition of the milk can have only a very limited effect as an exciting cause.

It is pleasing to pass from the too often disappointing treatment of tender nipples to consider the possibility of having the nipples perform their natural functions without the usual morbid results. In the lower ranks, from which a maternity hospital generally derives its patients, tender nipples are rare, since the habits of this class of society, and the more or less exposure of the nipples, in their case, to the tonic effects of atmospheric influence, will give less sensitive, because more natural, nipples. I have made inquiry at our hospital here, and I find that, out of every twenty women confined in it during the last two years, not more than one has suffered from sore nipples. This, it will readily be acknowledged, is a result much more favourable than we have in private practice. It has been customary to order, as a prophylactic, weak spirit and water or other mild astringent, but I have seen no evil result from the application of stronger astringents. As an astringent, however, especially if strong, is likely to cause a hardening only, and not a toughening of the nipple, we may have this organ cracking as soon as the outer film of hardened cuticle is removed, on the first application of the child to the breast. To obviate this I am in the habit of ordering the admixture of glycerine with the astringent, and the occasional application of some fatty substance, as lard. The selection of the particular astringent is, of course, of importance; but the thoroughness with which it is applied is more so. The solution I generally order is made up thus: A large teaspoonful of dry tea is put into a two-ounce vial, one ounce of brandy and a quarter of an ounce of glycerine (Price's) are added; and, after a few days, with occasional shaking, the solution is ready for use. For two or three months previous to parturition the nipples should be thoroughly washed every night with cold water and glycerine soap, dried, and the above solution carefully brushed over the nipple, but especially around the base and into the apex. This is left on all night, and, in the morning, the lard is rubbed well in. I have frequently used glycerine of tannic acid, but have come to regard it as not sufficiently powerful.

During this treatment the dress ought to be loose; and, if the nipples are at all retracted, they ought to be drawn out occasionally by suction or with the fingers and thumb. A circular piece of some unirritating material,

with a hole in the centre, might be used in severe cases.

When the child is born, and before I leave the house, I examine the nipples and breasts. If the latter are flaccid I would prefer not to put the child early to the nipple; and, when the milk has appeared, I advise the application of the child at intervals of not less than two hours, and to both nipples at each application, giving careful instructions against letting the nipple remain in the child's mouth after it has emptied the breast, and especially against allowing it to sleep at the breast. The nipple is to be moistened with water or saliva before applying the child to it; and, when the infant quits the breast, the nipple should be washed with a mild astringent and antiseptic solution with glycerine. The mixture I prefer is as follows: A teaspoonful each of whisky, tincture of arnica, and Price's glycerine in a wineglassful of cold water. The nipple, as soon as the infant leaves the breast, is washed with this and partially dried, and a nipple shield at once applied to protect the nipple from friction against the dress. One of the best nipple-shields is Wansbrough's; but, after using it for some time as it is sold, I had to discard it, on account of its keeping the nipple, in some cases, too moist, and softening the cuticle; certainly a great objection to its use. To prevent this, however, it is only necessary to pierce it *over the whole of its extent* with a large needle from within outwards; and, should the nipple be scalded from insufficient piercing, the rectifying of this error will suffice of itself to remove the inconvenience. I have little experience of other nipple-shields, though they may be made from a great variety of materials, and some of them might prove more convenient than Wansbrough's, to which another objection is that, though it should fit the nipple when first applied, the heat of the breast afterwards softens it: it then becomes corrugated and flattened, and thus affords little protection to the nipple. These objections could not apply to vulcanite nipple-shields, one of which, for trial, I have had prepared for me and pierced by Mr. Joseph Hilliard. Though used, I believe, in America, I do not find that they are known to any extent in this country. In using nipple-shields it is advisable to have them suspended round the neck by a ribbon; and care should be taken that they are frequently washed with soap and water; and if ointments are being used with them, a strong tooth-brush will be found serviceable to cleanse out the holes. Believing as I do in the importance of protecting the nipples in any prophylactic treatment, I advise, where the expense of good nipple shields is a consideration, the use of a small circular piece of gutta percha tissue, also pierced. But I suspect that, in such cases, unless care be taken to keep the gutta percha,

and the part over which it is applied, clean, pustules may form which might lead to inflammation in the deeper portion of the breast. But this need not happen; and patients have often informed me that the simple gutta-percha tissue thus applied is a considerable relief, especially when the nipples are tender. To supply the natural unctuous matter of which sucking deprives the nipple, I order the application of some simple ointment, as fresh oxide of zinc; glycerine soap and tepid water easily removing it before the child goes to the nipple.

The foregoing measures, if carefully carried out, I find, as a rule, sufficient to prevent tender nipples in cases where, from the sensitive temperament of the patient, such would probably have resulted; and that this is the case is, I think, borne out by the fact that, when the nurse leaves, and the prophylactic treatment of the nipples is more or less neglected, instead of being gradually left off, I have noticed in many cases that tender nipples begin, and this after an interval of four or more weeks of immunity from sore nipples.

To those who have been disappointed in the results of their treatment of sore nipples, and who have not put the prophylactic treatment to the test, I would strongly recommend a fair trial of the plan which I have briefly sketched.

#### THE TREATMENT OF SPERMATORRHEA AND IMPOTENCE.

One of the first and most important matters to be attended to is to relieve the constipation. But do not attempt to do this by means of cathartics, for they will give rise to a still greater relaxation than already exists. It is necessary, however, that the bowels should move daily, and the most satisfactory method of doing this is to have an enema of cold water administered every morning. This will produce a normal evacuation from the bowels, and at the same time will stimulate the blood-vessels and the surrounding parts to a more vigorous contraction, and accelerate their return to the normal condition. At first these injections may give rise to unpleasant sensations and perhaps to slight pain, but their continuance will do no harm whatever; on the contrary, they will be followed by marked benefit in most cases.

**DERANGEMENT OF DIGESTION.**—You will next turn your attention to the stomach. The patient's appetite usually is poor and very capricious, and food of almost every kind seems to give rise to dyspeptic symptoms. A question arises just here. Some textbooks direct you to refrain from ordering articles of food which increase the formation of seminal fluid and excite erections. This is a mistake. Do not pay the slightest attention to such advice, but recommend such a diet as will elevate the vitality of your patient and bring him up to the

normal standard. Give him oysters, eggs, milk, beef, mutton, and every variety of food which improves nutrition, and do it independently of any apparent increase in the number of emissions.

**SHALL ALCOHOLIC STIMULANTS BE WITHHELD?**—The question will arise, shall we permit such patients to partake of alcoholic stimulants? By nearly all practitioners these are discarded entirely, but there is an exception to this sweeping rule. The stomach in its debilitated condition may require some stimulant to arouse it into action, and so assist in the digestion of the oysters and other articles of food recommended. It is therefore well, in most cases belonging to this class, to prescribe some mild stimulant, such as claret, for it will promote good digestion without at all exciting inordinate desires or increasing the seminal emissions.

**BATHING.**—Another important adjuvant to the treatment already advised is the use of water in various ways. Direct your patient to take a cold sponge-bath every morning, unless it gives him such a chill that brisk friction does not bring about a free and full reaction. Never order a cold shower-bath. The patient will derive great benefit from sitz-baths taken at night, three or four times a week. He should not remain in the first one more than five minutes; the second bath may be prolonged to ten minutes, and soon the patient will be able to extend the time to fifteen or twenty minutes. Cold water at the same time may be thrown into the rectum.

**EXERCISE.**—This class of patients should take an abundance of vigorous muscular exercise, even to fatigue. Boxing is one of the best forms of exercise that can be employed, for it brings into action almost every muscle in the body. Walking, running, skating—in short, almost any out-of-door exercise—will be found beneficial. Horseback exercise can not be adopted with advantage.

So much for the general course to be pursued in the management of this class of cases.

**LOCAL TREATMENT.**—We come next to the important matter of local treatment. Many authors recommend that a sound be passed down to the prostatic portions of the urethra, when by its pressure it will empty the blood-vessels and reduce the sensitiveness of that portion of the canal. There is no objection to this plan of treatment, but it will not answer to depend upon it alone. The passing of a sound through the urethra three or four times a week, and continuing such treatment for months, will prove about as effective as it would to rub it over the patient's back. The occasional introduction of the sound, however, is not objectionable.

A double catheter has been recommended, through which a stream of cold water can be

carried down to the prostatic portion of the urethra. This can be resorted to about twice a day, but more especially it should be used at night. I do not recommend the use of caustics; but if it should be your judgment that a certain case will be benefited by cauterizing the prostatic portion of the urethra, there is no more convenient instrument which can be employed for this purpose than *Lallemand's porte caustique*, which you see here.

The principal local treatment which I rely upon is the application of electricity. For this purpose an electro-magnetic battery may be used, to which is attached an urethral electrode, such as you see here. This instrument is insulated to nearly the entire extent, except that part which is to rest against the prostatic portion of the urethra. The other electrode has attached to it a sponge, which is applied over the fourth lumbar vertebra, the region in which the genito-spinal centre is said to be situated, and also down over the sacrum. Now, having introduced the negative electrode and brought its point in contact with the prostatic portion of the canal, allow only a very feeble current to pass through at first. Do not give the patient any pain in the use of this agent. Increase the strength of the current gradually, and use as powerful a current as can be done without causing pain. The first sitting should last about five minutes. If the sitting be too long, a numbness of the parts will be produced, which will for some time delay proper reaction. The following day, instead of using the urethral electrode, you may use the wire-brush, passing it over the inside of the thighs about the perineum, and at the same time applying the sponge over the sacrum and over the lumbar region. The sponge can be carried as low down as the verge of the anus. The third day the urethral electrode may be again employed. At the second sitting the current can be kept up for eight minutes. No sitting, however, should be extended over ten or fifteen minutes.

By a single application of electricity in this manner I have reduced the number of nocturnal emissions from four or five a week to one. When they have been reduced to this number there is no further cause for anxiety, for in healthy men these emissions may occur as frequently as once a week or once in two weeks without producing harm. After the second week you may substitute the rectal for the urethral electrode. The rectal electrode comes in contact with that portion of the bowel lying over the prostate gland, and the current of electricity will diminish the congestion and give tone to the muscular fibres of the gland.

Some authorities recommend the use of the continuous current in all cases of impotence; but I have found the interrupted current to answer all purposes, and I never use any other.

When you desire to increase or stimulate the erectile power of your patient, it will be well for you to change the direction of the currents several times during one seance.

**MEDICAL TREATMENT.**—There are certain combinations of medicines which can be resorted to with benefit in these cases, and one of the best prescriptions for a tonic mixture is the following:

R Strychnia..... gr. j;  
Quinia sulph.h..... 3 ss;  
Tinet. ferri muriat..... 3 ss;  
Glycerina..... 3 iv.

M. et S. One half teaspoonful in a wineglass of water four times a day, half an hour before meals and at bedtime.

This is a most excellent tonic in all cases of general debility, and it will also promote erections, although it is not given for that purpose.

There are some patients who prefer to take their medicine in the form of pills. The following combination is tonic, and has more tendency to excite erections than the former:

R Arsenite of iron..... } aa grs. v.  
Ext. nux vomica ..... }  
Ergotine. .... }  
Sulphate of quinia..... } aa 3 ss.

M. et Div. in pil. No. xxx. S. One pill four times a day.

In cases in which constipation is a prominent symptom the ergotine may be dropped, and aloes, grs. x, can be substituted. But it is not necessary that you should confine yourselves to the use of these combinations of remedies. You may resort to the use of any tonic prescription with which you are familiar, and which, perhaps, may be a favorite.

**MEDICINAL TREATMENT OF IMPOTENCE.**—We will next suppose that our patient has been under treatment for some time, that his general health and strength have greatly improved, but that his erections are still imperfect. Now you can give him some of those drugs which are said to possess the power of producing venereal excitement—*aphrodisiacs*. A very common pill employed for this purpose, and one which is productive of good results, provided its effects are closely watched, contains:

R Ext. nux vomica..... gr. 1  
Phosphorus..... gr. 100

M. To be taken after meals.

Phosphorus is a powerful stimulant to the genital organs. It will be sufficient to administer the above pill twice a day. If it should disorder the stomach, stop its use at once. If you do not wish to use the phosphorus, you may resort to the fluid extract of damiana, giving it in half-drachm doses three times a day.

There is another remedy which will often operate favorably for this purpose, and that is the common drug known as water pepper. The tincture may be employed and administered in half-drachm to drachm doses. It can be resorted

to with advantage when a stimulating aphrodisiac is required.

Another common aphrodisiac is cantharides. Phosphorus increases the desire for sexual intercourse, and at the same time excites erections; cantharides simply excites erections.

The following prescription may be employed :

|   |                      |           |
|---|----------------------|-----------|
| R | Tr. cantharidis..... | } aa 3 j. |
|   | Tr. ergotæ.....      |           |
|   | Tr. nux vomica.....  |           |

M. S. Ten to twenty drops four times a day.

The following combination has been recommended by Dr. Bartholow as one of the best:

|   |                          |       |
|---|--------------------------|-------|
| R | Tr. sanguinaria.....     | 3 ss; |
|   | Fl. ext. stillingia..... | 3 ij. |

M. S. Twenty to thirty drops four times a day.

Another prescription, which is very efficacious, is the following:

|   |                  |         |
|---|------------------|---------|
| R | Capsicum.....    | grs. x; |
|   | Quin. sulph..... | grs. v; |
|   | Sherry wine..... | 3 jss.  |

M. To be taken at bedtime.

The preparations containing ergot, nux vomica, or cantharides, if the phosphorus is not employed, are those which I prefer. You will not always find it necessary to use these aphrodisiacs, because the applications of electricity generally produce in a short time sufficient erectile power for all practical purposes.

When the patient has been raised to the proper point he should get married.

Now a few words with reference to a second class of cases which will fall under your observation.

A man in general good health, who has probably indulged slightly in masturbation, who is able to have sexual intercourse, but when he is not having such intercourse regularly has nocturnal emissions three or four times a week. Erections trouble him almost constantly, and when he has emissions they occur during sleep and are accompanied with pleasurable sensations and dreams. Such a man comes for treatment under the impression that his genital apparatus is about to be ruined, and that his frequent emissions will destroy his general health.

In the management of his case tonics and aphrodisiacs will not be required; their administration will do harm. Such patients are relieved by the use of bromide of potassium or sodium. If the bromides are resorted to in the first class of cases you will do harm; so here if you employ the method of treatment recommended for the first group of patients you will be equally successful in effecting a cure. Bromide of potassium administered to a patient simply because he has seminal emissions may do a great deal of harm.

In the second class there is an over-excitement of the genital organs, which is usually controlled by administering twenty grains of

the bromide of potassium at night and four times a week. During the second week the dose may be increased to thirty grains, and that is about as far as it should be carried. Its use, however, should be preceded by a brisk cathartic. Independently of the bromide, camphor may be used in ten-grain doses at bedtime, or it may be combined with the bromide. Cold bathing will be found serviceable in this class of cases. This treatment, however, must necessarily produce only temporary benefit, for there will be relapse soon after the remedies are discontinued. The radical cure, therefore, consists in the man's getting married. Marriage alone is sufficient to bring about a cure. There is nothing which will relieve the abnormal congestion of the genitals so much as moderate sexual intercourse.—*Joseph W. Howe, M.D., in N.Y. Medical Record.*

#### ON THE TREATMENT OF RHEUMATIC FEVER.

By Dr. Julius Pollock, Senior Physician to Charing-Cross Hospital.

The treatment of rheumatic fever has lately undergone a complete revolution, which has happily placed it on a much more satisfactory footing. But a short time ago, a tolerably severe case was pretty sure to last six or seven weeks, almost uninfluenced by the remedies employed. Some put their faith in quinine, some in alkalies, some in various drugs, and some did nothing, with much the same result; and Sir William Jenner himself, when president of the Clinical Society, spoke of the doubt and uncertainty with which he used to approach the treatment of articular rheumatism under the old régime. It has been claimed for the alkaline treatment that it diminished the liability to heart mischief; but about this I think there is some doubt. If, however, it is thought desirable to try it, thirty grains of the bicarbonate of potash may be given every four hours, with or without five grains of nitrate of potash in some peppermint-water or any other suitable vehicle. The potash produces no disagreeable effects, and may be continued for any length of time. It always diminishes the acidity of urine, and sometimes makes it neutral or even alkaline. With this internal treatment, the affected joints may be kept wrapped up in lint soaked in an alkaline lotion (bicarbonate of soda, one ounce; distilled water, one pint), and covered first with oiled silk, and then flannel or cotton-wool. In all cases of rheumatic fever the bowels should be kept gently open, but it is needless and undesirable to purge for mere purging's sake. The diet should be light, consisting chiefly of slops. Stimulants are not necessary as a matter of course; and the patient must remain quietly in bed until such time as his disease takes its departure, which will vary,



under this treatment, according to the severity of the symptoms or the tendency to relapse, from three to six or seven weeks, or even longer.

My late colleague, Dr. Hyde Salter, was in the habit of using quinine in the treatment of acute or subacute rheumatism, and I have had many opportunities of observing the result, which I cannot say impressed me at all favourably. Dr. Garrod combines the quinine and alkaline treatment, using a mixture made by rubbing up the quinine with the bicarbonate of potash, a little mucilage, and some aromatic tincture, in such proportions that each ounce and a half of the mixture contains five grains of quinine (in the form of carbonate) and thirty grains of bicarbonate of potash. This dose is given to an adult every four hours, and continued as long as may be deemed desirable. Dr. Garrod speaks favourably of this combination.

Of the treatment of rheumatic fever by bleeding, mercury, colchicum, antimony, it is unnecessary to say more than that modern experience has found such agents powerful only for evil. Iodide of potassium has been a good deal used, and though of but little service during the height of the disorder, it is often useful later on, helping us to "speed the going guest." Guaiacum is another drug which is sometimes successful in relieving the pain of the joints in the more chronic forms of articular rheumatism.

Reference must be made to the external modes of treating or assisting the treatment of rheumatic fever. Of these the chief are the hot-air bath, the application of alkaline lotion, cotton-wool, blisters, or iodine paint, to the inflamed joints. The hot-air bath has seemed, in some instances, to relieve pain, and its diaphoretic effects may be of service in eliminating the morbid material of the disease; but in a complaint like acute rheumatism, where the temperature is liable to range high, the application of external heat cannot be made without some risk, and the permanent benefit would appear to be doubtful. Besides which the excessive pain that attends any movement in the height of the disease would make it difficult, if not dangerous, to apply the remedy. The application of warmth to the affected joints is always grateful to the patient, and wrapping them up in cotton-wool or flannel generally alleviates the pain. The use of the alkaline lotion may prove beneficial, either in the same way or from some soothing influence connected with the alkali. Blisters and iodine paint are scarcely applicable during the acute stage of the disease, but are often of service subsequently by hastening the absorption of any fluid that may linger in the joints, and toning up the weakened parts. Blisters should be applied a little above the affected joint rather than over it, whilst iodine paint should be used cautiously, as,

in certain persons, it produces such an inflammation of the skin as to amount almost to erysipelas.

Such, then, was the more or less unsatisfactory state of things with regard to the treatment of articular rheumatism until within the last year or two, when Dr. Maclagan struck the keynote to a better mode of action by his researches into the use of salicin. This physician published a paper in the *Lancet* On the Treatment of Acute Rheumatism by Salicin," (*Retrospect*, vol. lxxiii., p. 34), from which it appeared that having been struck by some analogy between that disease and intermittent fever, Dr. Maclagan conceived that acute rheumatism might be of malarious origin, and receive benefit from the alkaloid derived from the willow bark. Without entering into any discussion of the theory which led to the experiments, there is no doubt that they were more or less successful, Dr. Maclagan detailing several cases of true rheumatic fever which, under the use of salicin, became convalescent, on an average, in four days. The first case treated was in November, 1874, and there is no doubt that Dr. Maclagan was the first person who drew attention to the value of salicin in rheumatism. Subsequently to the publication of the paper in the *Lancet*, large numbers of cases of the disease were treated with salicin, but with somewhat varying results, and in my own case, I confess, without any success. The dose given was generally from twenty to thirty grains, or more, every two, three or four hours, and large amounts were required to be taken before much benefit was obtained. Such was the demand for salicin that the price of the drug rose from 1s. 6d. to 10s. or 12s. an ounce; and at one time there was an absolute famine, and wholesale dealers would quote no price for it.

In the meantime German physicians had been trying the effect of the derivatives of salicin—salicylic acid and the salicylate of soda. The second number of the *Lancet* of January, 1876, contained a notice of the observations of Dr. Reiss, in the Berlin Metropolitan Hospital, on the use of salicylate of soda, chiefly in regard to its action in reducing abnormal temperatures. Now, although salicylic acid and its soda salt may be valuable antipyretic agents in many cases of high temperature independently of the nature of the disease, it soon became apparent that their good effects were especially marked in rheumatism. This led to the use of the drug in ordinary cases of rheumatic fever, and with the most satisfactory results. Some observers preferred the acid, some the soda salt. It is probable that the salicylic acid is the active agent in either case, just as the iodine is the active agent in iodide of potassium; but crude iodine is rarely given now, and in a short time I believe the salicylate of soda will be used in all cases where the action

of salicylic acid is desired. It is very soluble, which the acid is not, and it is far less liable to give rise to unpleasant symptoms. I give the preference most decidedly to the soda salt as at present advised, though it is quite possible, indeed likely, that combinations of salicylic acid with potash, ammonia, and iron, may turn out to be very valuable. In any case of articular rheumatism, whether acute, subacute, or chronic, the salicylate of soda should be tried in doses of ten, fifteen, or twenty grains, every two, three, or four hours, according to the severity of the symptoms. It is best to give it alone, or in combination with a little spirits of chloroform or syrup of orange. As a rule, the good effects of the drug are apparent after eight or ten doses; the temperature falls rapidly to normal, or even a little below, the pain and swelling of the joints disappear, and the patient is practically convalescent in two or three days; but it is better to keep up the action of the medicine for a week or so, as relapses are liable to occur if it be discontinued too soon. In some intensely rheumatic subjects it will be necessary to give it again and again before the disease is subdued, and these cases have been used as an argument against its efficacy. Some persons will not admit the value of mercury and iodide of potassium in the treatment of syphilis, and others question the protective power of vaccination against small-pox. All new remedies have to encounter the opposition of ignorance and prejudice, but the evidence in favour of salicylate of soda in the treatment of articular rheumatism is becoming so overwhelming that its great value must shortly be thoroughly established.

No doubt the drug every now and then produces disagreeable symptoms—sickness, deafness, tinnitus aurium, and sometimes a peculiar cerebral disturbance; but these quickly vanish on a discontinuance of the medicine, which may usually be again given in a short time without any such result. In the earlier trials, when the salicylate was not quite pure, these objectionable symptoms were much more common than now. Dr. Murchison has suggested, in an able paper read before the Clinical Society on the 25th of last May, that the disagreeable effects of the remedy are due to suppression of the function of the kidneys, and has found albumen in the urine of patients who were taking the salicylate of soda, even when the drug was quite pure. This may be so, but at present I have been unable to collect any evidence on the subject.

One word in conclusion. On its first introduction, salicylate of soda was thought to be of special value in the hyperpyrexia of acute rheumatism, but about this there is, I think, some doubt. It controls the temperature by counteracting the rheumatic poison, but in these cases which I have spoken of early in this paper

as malignant, it frequently fails to reduce the temperature, and is as ineffectual to cure the patient as large doses of quinine or the cold bath.—*Lancet*, Oct. 20, 1877, p. 564.

#### TREATMENT OF SECONDARY PUERPERAL HEMORRHAGE.

Dr. Bailly, Prof. Agrégé of the Faculty of Medicine, contributes a paper to the *Bulletin de Thérapeutique* for September 30, on the efficacy of this method of treating secondary uterine hemorrhage, devised by Prof. Tarnier. By secondary hemorrhages he understands those which are produced from the second day to a month after delivery. These are generally due to a congestion of the uterus, usually spontaneous, but sometimes caused by the presence of a foreign body in the cavity, too early getting up, a violent effort, or vaginal injections injudiciously employed. Such hemorrhages are rarely dangerous, but they recur frequently and often obstinately, and cause great alarm to the patient. The ordinary measures for arresting them are far from being always successful, and are usually tedious; and, at Prof. Tarnier's suggestion, the author of this paper commenced in 1874 the trial of warm baths. The success attending the use of these has been so great that he publishes two of the cases in which he employed them. In the first of these the hemorrhage commenced only on the eighteenth day after delivery, in a woman of feeble habit of body. The uterus was enlarged and congested, and the hemorrhage, without being alarming, resisted all the usual hæmostatics during ten days. Prof. Tarnier now advised warm baths. The first of these greatly modified the discharge, and the second suspended it completely. Recurring at the end of thirty-six hours, it was definitively arrested by the third. The uterus gradually diminished in size, and at the end of a week the patient was able to get up. In the second case the hemorrhage came on only on the twenty-seventh day after delivery, the uterus being as much developed as at the third month. The liquid blood discharged was not very considerable, but it became continuous, and was accompanied by coagula. Ergot in different forms, and vinegar injections, having been tried in vain, a warm bath of half an hour at once suspended the discharge; and, on this recurring next day, a second bath completed the cure.

Although in possession of several cases in which their efficacy proved as complete as in these two, Dr. Bailly observes that their success is not always so prompt. He has always found them less efficacious at the commencement of the hemorrhage than when this had persisted for some time; but, as they produce no inconvenience at the earlier periods, they may also be then employed concurrently with other

measures. The only objection to the method that he is aware of is, that at first it shocks the prejudices and alarms the patient. They should not be resorted to prior to the tenth day after delivery, in consequence of the fatigue and danger which their application might then give rise to. Care must be taken, also, that the temperature of the water (about  $34^{\circ}$  C. or  $93^{\circ}$  Fahr.) should be rather raised than lowered, all chilling being avoided. From twenty to thirty minutes is a long enough duration to secure the general revulsion sought for; and as one bath rarely proves enough, they may be repeated daily. Prof. Tarnier was induced to try the procedure in puerperal metrorrhagia in consequence of having observed its efficacy in the hands of M. Salgue, of Dijon, who successfully employed it in non-puerperal metrorrhagia; he adopted it for this form of hemorrhage after delivery, and has for many years recommended it.

In another number of the *Bulletin* (Oct. 30) we find an article by Dr. Constantin Paul, Professeur-Agrégé, upon the great utility of hypodermic injections of ergotine in various forms of metrorrhagia. The formula which he has employed has been—ergotine two grammes, water and glycerine of each fifteen grammes. The solution assumes the brown colour of the extract of ergot, and keeps well, not losing any of its activity in even three months after its preparation. In the fourteen cases in which he has employed this, Dr. Paul has found it succeed in almost a marvellous manner; the hemorrhage, which was always severe and often dangerous, having in all been arrested in sixteen minutes at latest, and in several much earlier. The patients were either the subjects of more or less advanced cancer of the uterus, or in the puerperal condition. The advantageous action of ergot, taken internally, on uterine hemorrhage, has been long known; but on comparing this with the effect of hypodermic injection, the latter proves of much greater value. The time required for the operation of ergot varies from a quarter of an hour to thirty-six hours; while ergotine arrests the hemorrhage in from five to ten minutes; and in hemorrhages time is everything. Not only is the action of powder of ergot less rapid than the injection, but it is also less constantly efficacious, three or four doses being sometimes required. Ergot in powder also always gives rise to colicky pains, of which the patients complain much; but this is not so with the ergotine. The injection is not very painful, and does not produce any local inflammation, sometimes only leaving a slight hyperæsthesia at the point of insertion. So employed, intolerance of ergotine has never been noted. As Prof. Gubler has already observed, it is most remarkable that while a dose of even four

grammes taken by the mouth is very doubtful in its action, a dose sixty times less, given by injection, exerts so marked an effect. Certainly there is far greater discrepancy in the doses required, according to the mode of administration, than is observed with regard to most medicinal substances. In the cases related by Dr. Paul in his paper, an injection of sixty-six milligrammes of ergotine arrested the hemorrhage in from five to ten minutes.—*Med. Times and Gaz.*, Dec. 8, 1877.

## THE CANADA MEDICAL RECORD A Monthly Journal of Medicine and Surgery.

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### RETIREMENT OF T. SPENCER WELLS.

T. Spencer Wells has retired from the Samaritan Hospital of London, at which institution he made his reputation as an ovariectomist. He performed in the above hospital 408 ovariectomies, with 309 recoveries. Of the last 29 performed last year, 27 recovered. His remarks on his retirement are worthy of being read. We give them below:

"A long while ago I was deeply impressed by some remarks made by Sir Benjamin Brodie on his retirement from St. George's Hospital, after 18 years' service as surgeon. I forget the exact words, but he has reprinted something very like them in the conclusion to his 'Autobiography.' He says: 'It was not without a painful effort that I made up my mind to resign an office to which I had been sincerely attached. In doing so I was influenced by various considerations. One of them was, that I began to feel the necessity of diminishing the amount of my labors. Then, I have long since formed the resolution that I would not have it said of myself, as I had heard it said of others, that I retained a situation of such importance and responsibility when, either from age or from indifference, I have ceased to be fully equal to the duties belonging to it. And, lastly, when I saw intelligent and diligent and otherwise deserving young men around me, waiting their turn to succeed to the hospital appointments, it seemed to me that there was something selfish in standing longer in their way, when, as far as my own

mere worldly interests were concerned, I had obtained all that I could desire.'

"When I first heard these statements of Sir Benjamin Brodie, I determined that, if I should ever be placed in any like position, I would do my best to follow the example set by so wise and good a man; and, in carrying out that determination now, I trust that, while I am thus enabled to devote more time and attention to my private practice, I shall still be of some use to the suffering women in the hospital, without standing in the way of ambitious and deserving juniors, who have worked long and hard for the position they have now attained, and which, I sincerely hope, they may enjoy for many years to come."

#### SULPHUROUS ACID IN THE TREATMENT OF ABSCESSSES.

At a recent meeting of the Clinical Society of London, Mr. Osman Vincent described a method by which he had opened eighteen lumbar abscesses without a fatal result. The abscess was first opened and then injected with a solution of equal parts of sulphurous acid and water, after which a poultice was put on. Next day the injection was renewed, and some tenax applied. The treatment went on till the cavity healed up. The injection sometimes gave pain. Sometimes the fluid returned clear, and at other times black. When sulphurous acid was injected, it acted upon the pyogenic membrane, and then pus did not re-form.

#### OBITUARY.

Hector Peltier, M.D., Edin., Professor of the Institutes of Medicine, in the Montreal School of Medicine, affiliated with Victoria College, Cobourg, died on the 26th of January, in the fifty-sixth year of his age. Dr. Peltier was one of the most prominent of the French Canadian physicians in the city of Montreal, and was held in the highest esteem and consideration by every member of the profession of both nationalities. He was, in fact, a bond of union between the two nationalities, and his death leaves a blank which it will be difficult to fill. Possessed of a nature highly polished and sympathetic, he was the friend of all, ready at all times to smooth down asperities, which he often did by the geniality of his disposition, and gentlemanly candour. Death overtook him, as it so often

does members of our profession, while actively engaged at his work. Three days before his death, while engaged in lecturing to his class, indistinctness of utterance was noticed, and so rapidly increased, that he closed his lecture. Before leaving the College building this increased rapidly, and was followed by hemiplegia. He was conveyed to his residence, and the aid of his *confrères* called in. Consciousness returned considerably, and he was able to signify his prompt recognition of friends by mentioning their names. He continued in this condition for a couple of days, when the symptoms again became worse. Profound coma then rapidly supervened, and, on the third day from the commencement of the attack, he quietly breathed his last. For the following particulars of his life we are chiefly indebted to our contemporary, the *Canada Medical and Surgical Journal*:—

Dr. Peltier was the son of the late Toussaint Peltier, Q.C., a man who, in his lifetime, enjoyed the confidence of the public as an advocate of learning and ability, and of scrupulous probity. At an early age Hector, his son, was sent to the college at Nicolet, where he commenced his studies in general education. Subsequently he attended as a day scholar at the College of Montreal. In 1838 his father, with the view of giving his son superior advantages, sent him to Paris to the College of Henri IV., where he spent two years in following the higher branches of a liberal education. Here he was remarkable for his perseverance, ability and punctuality and the uniform gentleness and amiability of his disposition. After completing his preliminary education, medicine became the profession of his choice, and he entered as a pupil at L'Ecole de Medicine, Paris, and followed the courses in that faculty, while attending the practice of the hospitals. In August, 1844, he repaired to London, and, during the ensuing two months, attended the practice of Guy's and St. Thomas' hospitals. The following October he proceeded to Edinburgh and entered as a student at the university in that city, where he graduated on the 1st of August, 1845. On leaving Edinburgh he again visited Paris, where he remained for a short time; and, after a visit to Dublin, he finally sailed from Liverpool for New York, whence he returned to Montreal.

In February, 1846, he received the license of the old Medical Board, entitling him to practice his profession in Canada.

In 1848 Dr. Peltier, with a few other young men (of whom the late Sir G. Duncan Gibb, Bart., of London, England, was one), established the Pathological Society of Montreal, and the year following Dr. Peltier was elected Vice-President, and subsequently he filled the Presidential chair.

The year 1849 brought an epidemic of Asiatic cholera. The larger share of the labour fell on the

junior members of the profession, as that disease was most prevalent amongst the poorer class of the community. As it was believed that, in all likelihood, cholera would again invade the city the year following, it was deemed desirable to establish a free dispensary for affording relief to the poor of the city. Relief was to be afforded to all deserving comers, independent of creed or nationality. Dr. Peltier shared in this good work of getting up and establishing on a sure footing this charitable institution. He, with five other physicians, canvassed the city for support, and the Montreal Dispensary was firmly established—an institution which subsequently received an Act of Incorporation from the Legislature, and which to this day is recognised as one of the prominent and most useful charities of this city of Montreal.

Dr. Peltier assiduously performed his duty as one of the attending physicians to the dispensary, and continued to do so long after he had received an appointment as one of the attending staff to the Hôtel Dieu Hospital. This, with increasing practice, and service rendered to several other charities, so encroached upon his time that he was forced to retire from the active staff of the dispensary when he was unanimously elected a consulting physician to that charity,—and he continued to the last to take a deep interest in the welfare of the institution.

After the passing of the Act of Incorporation of the profession of this Province in 1847, in consequence of the provisions of the Act regulating the study of medicine, several additional lectureships in the School of Medicine and Surgery had to be made, and Dr. Peltier was selected to fill the Chair of Institutes of Medicine; this was in August, 1847. This chair he has filled ever since.

Dr. Peltier contributed several papers of worth, which are to be found in the pages of the Canadian periodicals—one, in the French language, which appeared in the *Canada Medical Journal* for April, 1852, on a case of compound comminuted fracture of the astragalus, with dislocation of the bone. Several other papers from the pen of Dr. Peltier are to be found in the pages of the *Medical Chronicle*—all of worth and interest.

In 1850 Dr. Peltier was elected a Governor of the College of Physicians and Surgeons of Lower Canada, and since that period he has always received the support and votes of his *confreres* of both nationalities. He has held the several offices of Secretary, Registrar, and Vice-President, and, had he lived, would have succeeded to the Presidential chair, as he was a general favourite, a fluent speaker, and full of wit and humour.

In 1872 the Medico-Chirurgical Society of Montreal was re-organised, and, in consequence of a previous failure of this Society, when the papers were written and the debates conducted in both languages, it was decided that its proceedings should be carried on in English. This society Dr. Peltier joined, and the high estimation in which he was

held by his English brethren is shown by the fact that he was, in the second year of its existence, elected to its presidential chair. His successful administration of its affairs, and his genial hospitality extended on one well-remembered occasion to its members, is looked back upon with unbounded pleasure by all who participated in it. The cordial good feeling towards him will be well understood when we state that the various Medical Schools in Montreal, as well as their students, passed resolutions of condolence to his family on his death. Not only this, but they all attended his funeral in a body—the funeral cortège being one of the largest ever seen in Montreal. Although dead, he yet speaks, and his memory will remain green with all who knew him. It will be long before we look upon his like again.

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DR. ROBERT LEA MACDONNELL.

Seldom, if ever, has Montreal been called upon, almost within a week, to mourn the loss of two such eminent medical men as Dr. Peltier whose obituary is given above, and the gentleman whose name heads this notice. Dr. Robert Lea MacDonnell was a physician whom any city might be proud to have among its practitioners. Born in the City of Dublin, Ireland, and the son of an eminent physician of that city, he received a liberal education, and early showed a predilection for the medical profession. Soon after his graduation, he assumed the assistant editorship of that well-known medical journal, the *Dublin Quarterly Journal of Medical Science*. Circumstances, however, induced him to turn his eyes to Canada, and the Professorship of Institutes of Medicine of McGill College being advertised as vacant, he applied for and obtained it before his arrival in Montreal. On coming to this city he at once assumed a prominent position, and was elected on the staff of the Montreal General Hospital. An apparently brilliant offer reaching him from Toronto, he was induced to throw up his appointments and proceed thither, only, however, to meet with such bitter disappointment that he returned to Montreal after an absence of a few months. On the inception of the St. Patrick's Hospital scheme, about the year 1851, he at once heartily gave his assent to it, and, along with Dr. David, took an active part in its early organization. He became attached to it as surgeon, and served in that capacity till its absorption by the



community of the Hotel Dieu about 1863, when his services were dispensed with. In the year 1852, in conjunction with Dr. David, the present Dean of Bishop's College Medical Faculty, he edited the *Canada Medical Journal*, which ceased to live after a year's existence. From this period he devoted himself to his private practice, which soon became large, and embraced many of Montreal's leading families. He was a clear diagnostician, and in gynaecological diseases had a Canadian reputation. As a teacher of clinical medicine he was admittedly one of the best, if indeed not the best in Canada, and even somewhat recently, more than once hoped that, before his labor was completed, he might yet be in a position to resume what to him was a labor of love. In the Western Hospital movement he was known to take a deep interest, and had that institution been opened, as it was hoped it would have been, in the winter of 1876, he would have been one of its physicians. Dr. MacDonnell was a graduate of K. & Q. C. P. Dublin 1844, and M. R. C. S. J. 1841. He was prizeman in Surgery at the Richmond Hospital Medical School in the year 1839. In the spring of 1877, the University of Bishop's College granted him the degree of M.D., *honoris causa*. He was unable to attend the Convocation of last spring at Lennoxville to have the degree conferred, but had he lived, Convocation would have conferred it on him at the meeting which will take place in Montreal, in April next. But it was decreed otherwise, and his death was sudden and distressing. Although incapacitated by a certain amount of lameness from very active exertion, his feeling of friendship for the late Dr. Peltier induced him to attend his funeral. While sitting in his sleigh, waiting to join the funeral cortège, a run-away horse with sleigh attached came dashing along. He was struck violently by the shaft (it is believed) on the side of the head, and thrown from his sleigh to the ground. Quickly surrounded by medical friends, he was taken up and conveyed home, regaining complete consciousness before reaching it. He was able to walk into his house, and to answer every question put to him. For twenty-four hours he continued, apparently, without showing the slightest indication of danger, indeed, improving, when suddenly comatose symptoms came on, and in two brief hours he passed away. On the 30th of January a post mortem exam-

ination revealed most extensive fracture at the base of the brain. Dr. MacDonnell leaves behind him one son—Dr. Richard L. MacDonnell—the esteemed assistant demonstrator of anatomy in McGill University.

Dr. E. R. Peaslee, the well-known gynaecologist of New York, died in that city early this month, from an attack of pneumonia. He was a poor speaker, but a good writer, and a brilliant operator. He had attained a good old age.

*The Action of Medicines*, by Isaac Ott, A.M., M.D., formerly Demonstrator of Experimental Physiology at the University of Pennsylvania, with twenty-two illustrations. Philadelphia, Lindsay & Blakiston; Montreal, Dawson Bros.

The physiological action of drugs upon man and the lower animals is a subject, which, during the last few years, has found many earnest and enthusiastic students. The object of their investigations is the placing of the therapeutics on a more scientific basis than is at the present time the case, and certainly should receive the warm encouragement of every member of the profession who desires its advancement. The work before us is an exceedingly interesting one, as it gives the result of a very large amount of original investigation, which Dr. Ott seems to be well qualified to pursue. The various conclusions which the author draws seem the legitimate sequence of the numerous experiments he has performed. The book is divided into four chapters, viz.: 1. How to study the physiological action of medicines. 2. Action on the nervous system. 3. Action on circulatory apparatus. 4. Action of medicines. The first chapter is chiefly interesting to those who may be disposed to pursue the investigation of the subject. The others are of great interest and moment to every thoughtful member of the profession. We feel that works like the present deserve the fullest encouragement from the profession, as their successful sale is an inducement to still further labor in the same direction. Appreciation of efforts made will stimulate to still greater exertion; cold indifference has blighted many a life, calculated, perchance, to add perhaps more than one link to our knowledge. Dr. Ott, the author of this book, is engaged in a good work. His volume is a very valuable contribution to medical science.

*Cutaneous and Venereal Memoranda*, by Henry G. Piffard, M.A., M.D., Professor of Dermatology, University of New York, and George Henry Fox, A.M., M.D., Surgeon to the New York Dispensary. New York, William Wood & Co.; Montreal, Dawson Bros., 1877.

We have read this little work through with a very great deal of pleasure and profit. Its size is so small and compact that it might be held in one hand for an hour, without occasioning any fatigue. This we consider no small recommendation, for, usually, medical works are difficult of manipulation. Although the book is intended chiefly for students who are unable to procure voluminous works on the special subjects of which it treats, it is still worthy of being purchased by medical men, who, with time constantly occupied, desire occasionally and with speed to refresh their memory, especially on the subject of treatment. The discussion of theoretical questions has been avoided, and histological details have been omitted: this we think very wise, their introduction would have increased the size of the book, and not have added to its practical character. The metric system, as well as the old method, are given, so that those who desire to use either formulas have them at their disposal. The various important skin diseases are described in language so plain, and yet scientific, that we might almost say, "that he who runs may read."

*Biddle's Materia Medica*, by John B. Biddle, M.D., professor of Materia Medica in the Jefferson Medical College, Philadelphia. Eighth edition, revised and enlarged, with numerous illustrations. Philadelphia, Lindsay & Blakiston; Montreal, Dawson Brothers, 1878.

For year's Biddle's *Materia Medica* has been a standard text book in, we believe, every medical college in the Dominion of Canada, and rightly so; for we express but our honest conviction when we say that no *Materia Medica* of the same size contains as much valuable information as it does. Every edition which has been issued,—and the demand for the work has been so great that editions succeeded each other in very rapid succession—has been fully up to the latest advances in *Materia Medica*. Its style is clear

and succinct, and, even on very dry subjects, it makes the reading pleasant. The book has many new illustrations, representing, as in previous editions, most of the important indigenous and naturalized plants. It also has diagrams of the instruments employed in the atomization of liquids, in the new operation of pneumatic aspiration, in the transfusion of blood, and in the recently introduced pneumatic method in the treatment of thoracic diseases.

Most cordially we recommend this book to students of medicine.

*The Practitioner's Reference Book*, adapted to the use of the Physician and Pharmacist and the Student. By RICHARD J. DUNGLESON, M.D., Philadelphia: Lindsay & Blakiston, 1877.

This is a volume of three hundred and thirty-five pages, and it has been upon our table quite long enough to enable us to form some idea of its value, as a reference book. As mentioned by the author there are in this work, facts and hints, culled from various works and periodicals, which from the scattered sources from which they have been taken must otherwise have remained inaccessible to many. Their collection in a substantial volume is a boon which we have appreciated, and which we feel sure will be appreciated by all who purchase the volume. It is well worthy to find a place on the study table of every practising physician—such is our opinion after having the volume in our possession for over three months. It can be had direct from the publishers, or through Dawson Bros., Montreal.

*A Treatise on Gonorrhœa and Syphilis*. By SILAS DURKEE, M.D., Consulting Surgeon of the Boston City Hospital. Sixth Edition, with eight colored illustrations. Philadelphia, Lindsay & Blakiston; Montreal, Dawson Brothers.

This is nominally a new edition of this work, but we confess that we see little, if any, new matter in it, comparing it with the last edition; still it is a very readable and valuable treatise upon a class of affections which are, unfortunately for the human family, of too common occurrence. It is a work of a very practical character, giving a number of useful prescriptions which Dr. Durkee has found of great service in the treatment of gonorrhœa and syphilis, and, in spite of some imperfections, it will form a valuable addition to the library of any medical man. The colored illustrations are very good, and, altogether, the work is produced in a most creditable manner.

## MEDICO-CHIRURGICAL SOCIETY.

Montreal, Jan. 26th, 1878.

The President (Dr. F. W. CAMPBELL) in the chair.

Dr. BAYNES read his paper on Electrical Therapeutics, which will be found among our original articles. The following discussion ensued.

Dr. REDDY related a case of severe post partem hemorrhage, where he used every known means to arrest the flow without avail, until he sent for his "Palmer's apparatus" and used it with perfect success. Also related cases where lumbago had been cured by it; had experienced its good effects in himself. He also spoke of having tried it in tinnitus aurium, constipation, etc.

Dr. BULLER said that he had been disappointed in its use in tinnitus.

Dr. H. HOWARD expressed his interest in the paper and the great number of cases mentioned in which electricity is said to be beneficial, and expressed the hope that it would do away with the use of medicines to a great extent. Said that in old times he had used it often in tinnitus, but with no good effects.

Dr. TRENHOLME complimented Dr. Baynes on his paper. Expressed his conviction that electricity would be more largely used in the future. Spoke of its good effects in post partem hemorrhage, but thought that hot water injected into the uterus would act with the same results. He was glad that there was such a person as Dr. Baynes in the city, and would be disposed to throw cases in his way.

Dr. SHEPHARD said that hot water had been used in Germany for some time in post partem hemorrhage. Expressed his skepticism as to the effects of electricity in it, but has seen it used with success in aphonia.

Dr. KENNEDY spoke of paralysis in diphtheria. Wished to ask Dr. Baynes about the effect of application of electricity, upon the heart.

Dr. PROUDFOOT said that he had not been much pleased with the results either in eye or ear cases from the use of electricity.

Dr. LOVERIN spoke favorably of the use of electricity.

Dr. F. W. CAMPBELL took exception to the statement, that ergot always did the woman and child harm, whilst electricity never did. He had used ergot very largely for seventeen years, but had never seen any evil effect either to child or mother.

Dr. REDDY had done the same thing.

Dr. TRENHOLME, also, had never seen any bad effects from ergot.

Dr. H. HOWARD said that he had once seen a case of rupture of the uterus from the use of ergot in a woman who had previously borne children.

Dr. Baynes, in reply, stated that he had been misunderstood with regard to the action of ergot always doing harm. He said that it occasionally did so.

Dr. H. HOWARD moved, and Dr. REDDY, seconded a vote of thanks to Dr. Baynes for his admirable paper.

Dr. NELSON related the history of a case of cancer of stomach. *Case.*—Small French Canadian woman, who had a tumor over stomach size of an egg. Eighteen months ago had been in good health. Nine months ago first discovered the tumor herself; had had children; had no history of cancerous disease in any of her family. Drs. Kennedy and Fuller in consultation diagnosed cancer of stomach.

Dr. Loverin proposed a vote of thanks, seconded by Dr. Trenholme, for the very interesting pathological specimens.

## UNIVERSITY OF EDINBURGH.

The number of medical students in attendance at the University of Edinburgh, the present season, is nine hundred and twenty.

## MEDICAL ITEMS.

A statue of Dr. Graves was unveiled by the Duke of Marlborough, with imposing ceremonies, in the Hall of the College of Surgeons, Dublin, the latter part of December.

Dr. Jurecki is the only Russian surgeon reported killed during the war. He was killed during the attack on Kars.

Dr. Lister is now using horse hair for drainage. He thinks it superior to either rubber tubes or cat-gut. He has apologized for his offensive remarks about clinical surgery teaching in London. He says that his remarks were based on the condition of teaching when he was a student, and that they were not intended for publication.

Dr. Stokes, sr., the celebrated Dublin physician, died on the 7th of January.

## PERMANENT CURE FOR COSTIVENESS.

R Sodæ sulphatis..... 20 grains.

Ac. nitro-muriat..... 5 drops.

Sig.—Take one hour before breakfast.

## Original Communications.

*Observations on Incised and Penetrating Wounds of the Knee-Joint.* A paper read before the District of Bedford Medical Society, January 1878. By A. D. STEVENS, M.D., Dunham, Que.

MR. PRESIDENT AND GENTLEMEN:—About a year and a half ago, possibly two years, I promised our worthy president that I would read a paper before this Association at the then approaching meeting. My time was limited, but I wrote and expected to be present to read the following, but, for unavoidable reasons, have not been able to attend since, and consequently could not do so. My subject is, or rather was Incised and Penetrating Wounds of the Knee-joint, with three cases as illustrations. With your consent, gentlemen, I will now read what I then hastily prepared.

It is no secret that the profession have for a long time considered wounds of the joints to be accidents of a very grave character, particularly when the larger ones were injured. The inflammation that is so likely to be set up, causes not only much suffering to the patient during the acute stage, but, under the best care, too often, we are told, results in serious injury to the synovial membrane, the cartilages, the bones, or to all of them. In fact, the first limb I ever saw amputated (while yet a student) was in the case of a young man, otherwise apparently healthy, but who had extensive change of structure of the knee-joint, as a result of inflammation.

It would seem out of place to repeat here what we have all long ago learned, either in the lecture room or from surgical works, of the pathology and symptoms of synovitis, as well as its causes. Permit me, then, to limit my remarks to a consideration of the *treatment* of penetrating wounds of the joints, as we generally meet them in the country. In the meantime, I might add that, while I would not fail, as a precautionary measure, to inform both patient and friends of the very serious consequences that might happen, I do not entertain the feelings of alarm, as to results, that some persons seem to hold, provided the subject be of the type ordinarily found in an agricultural community like our own, and perfect, absolute rest of the joint

can be secured. Indeed, so far as the three cases which I am about to give an account of are concerned, it has seemed to me that perfect, unflinching rest of the joints was of infinitely more importance than all the medication used. Of such importance do I consider the fixing of the joint, that I would venture the opinion that where it can be satisfactorily carried out, the great majority of wounds, of even the knee-joint, especially if incised, will terminate without untoward results; and, though inflammation should supervene, and the cavity fill with pus, if positive rest of the joint is secured, it does not follow that you will get degeneration of the tissues, involving either excision, ankylosis, or, in fact, any impairment whatever of the usefulness of the joint. But the great trouble I have had to contend with, in treating these cases, has been in getting the patients and friends to properly realize the extreme necessity of that uninterrupted repose just alluded to and in securing their assistance in carrying it out. The pain, no doubt is excruciating, but it will, in any stage or condition of the joint, be very much mitigated by rest.

Then, again, we have heard a great deal about the danger of making incisions into the joints, and thereby admitting air into their cavities, but, so far as my observation extends, the danger is far less than some suppose. At any rate, had there not been a free opening made by a sharp instrument in these cases of mine, I should not have hesitated, on the appearance of pus, to have made one for its exit, whether I was fortunate enough to possess an aspirator or not. In large and overcrowded hospitals, the entrance of air into the cavity of a joint may possibly be productive of much mischief, but, in the pure air of our Townships, I cannot think its admission of very much account, at all events ordinarily.

In making these observations, the thought has suggested itself to ask the question why the serous and fibrous tissues of the joints, when inflamed, should not terminate as favorably when rest is obtained, as the same tissues in other parts of the body, where that condition is fulfilled by attachments or relations with other organs or parts, and without mechanical aid? If these tissues are attacked by inflammation in certain parts of the system we do not shake our heads in reference to the future, but "pur-

sue the even tenor of our way." It is true there may remain adhesions, and possibly other consequences, but we do not fear that life will be imperiled thereby.

The peritoneum, the membranes of the brain, and the pericardium, when attacked by inflammation, are rendered so very dangerous more on account of the impossibility of securing rest than from any other cause. In the case of the peritoneum, you have the peristaltic motions of the intestines to contend with. In the case of the membranes of the brain, the movements of the convolutions; and in the pericardium, those of the heart. Could you obtain the same state of quietude in these inflammations that is possible in synovitis, the mortality would, I have no doubt, be far less. The oldest of you will remember with what pertinacity the celebrated Dr. Clarke of New York labored to convince the profession of the value of large doses of opium in peritonitis, and, if you had the pleasure of listening to his lectures, how eloquent he would get upon the subject. Now, that *that* drug will, as nearly as any other remedy, fulfill the indication of rest to the intestines, I think no one who has tried it will deny; but that it is possible always to secure that perfect control over the movements of the bowels and, for a sufficient length of time, that is so essential to recovery, I do not believe. If it possessed that power of complete and prolonged control, you would have far less reason to complain of the proportion of your cures. Who has not felt the temptation to open the bowels in these cases almost irresistible? Let us rather assist the "*vis medicatrix naturæ*" in its grasp of them, until such time arrives as they may be safely opened. Of course, it is idle to talk of arresting, or suspending, the movements of the heart and brain at any time.

The first case of which I propose to speak occurred in February, 1873, and was in the person of a boy about sixteen years of age, of healthy appearance himself, as well as his parents. He had been preparing wood for sugar making, and accidentally struck his knee with the axe, inflicting a wound about an inch in length upon the upper and outer border of the patella, and exposing the joint to that extent. He did not stop using the injured limb until an active inflammation set in, when my services were asked. Upon visiting him, I found all the

symptoms of inflammation well marked, and the limb placed in the usual position, with a view of lessening pain. I at once gave him alterative doses of grey powders with Dover, and cold applications were placed upon the affected joint. After the more acute symptoms had subsided, I gave him iodide of potassium, with compound tincture of gentian, and painted the knee with tincture of iodine. At this time, I was also able to place a well-adjusted splint upon the posterior portion of the limb, in such a manner as to secure perfect rest of the joint, with the limb straightened. But few days passed before the presence of pus in the cavity of the joint was evident, but as the opening made by the axe still existed, I did not interfere. At this juncture a somewhat amusing incident occurred, which is worth relating. When I reached the house, the father of the young patient came out to meet me, and after a few preliminaries, announced the fact that he had sent for one of those gentlemen for a consultation who possess the power of curing all sorts of ills by a certain kind of charmed stick. Of course, I told him that I could not consent to the arrangement, but, if he chose, would give the patient up to him, or any person else. This did not seem exactly to suit the father, and I consented to see the patient. I found him, as before stated, with the joint well filled with pus, and my learned friend looking intensely wise over the case. After making various comments (one of which was most emphatically that there was no "matter" in the joint) he retired. This furnished a favorable opportunity of "shewing up" my friend. I turned the boy over upon his belly, when a large amount of pus escaped from the opening. Then "the tables were turned" against the man of the sticks, and I went on, from this time till the end, unmolested. The remainder of the treatment consisted principally in keeping the limb in the position forced by the splint, and doing for him whatever constitutionally he might require. The joint filled at least a half dozen times with pus, but was as often emptied by turning him over, as before described. The patient was kept in bed with the splint securely fastened to the leg till all appearances of disease had left, when he was allowed to use it cautiously. He has to-day as valuable a limb as he ever had.

The second case occurred in the month of



August, 1875, and was in the person of a boy about fourteen years old. Like the preceding case, he was healthy, and of healthy origin. The cut was made with the axe, as in the former instance, but nearly opposite the site of the other, and about the same length. I did not see this boy, however, till suppuration had taken place, so that he had only to be turned over to relieve the joint of its contents. It only filled once, fortunately, and, with the aid of the splint already noticed, and alterative doses of iodide of potassium combined with a bitter tonic, and free painting of the joint, soon all traces of disease disappeared. About the middle of the following October he was able to do full duty upon the farm.

With reference to the third case I promised to speak about, I might say that, like the other two, he was apparently healthy and of robust parentage, while his age was about thirty years. He is married, and his occupation that of carpenter. While working at the frame of a building his adze, from some cause or other, missed and struck him a blow just underneath, and a little to the right of the patella, causing a wound fully an inch in length, and penetrating the joint. I saw him within two hours of the accident. He had lost only a trifling amount of blood, but the wound was gaping to such an extent that the synovial membrane was visible for more than the length of the cut. Thus you will perceive the cavity of the joint received all the fresh air you could ask for. This fellow I strapped with the ordinary adhesive straps in such a manner as to prevent any motion whatever of the joint, and enjoined him on no account to step upon the foot. He returned twice afterwards, for a renewal of the dressing, which, with a simple wash of carbolic acid, was all that was required for the cure of the wound. The wound healed by the first intention, and consequently no inflammation supervened, or, in fact, any other untoward event. In less than four weeks he was as well able to work as ever.

These, gentlemen, are all the leading facts and particulars of the three cases, with the exception of the passive motion used in order to prevent ankylosis, and which I forgot to mention in the proper place. I shall be glad to hear any remarks you may choose to make.

Dunham, Que., March, 1878.

## Progress of Medical Science.

### A METHOD OF SHORTENING THE FIRST AND SECOND STAGES IN NORMAL LABOR.

A perfectly normal labor, lasting twenty-four hours or thereabouts, with regular, strong pains, occurring in a healthy, sensible woman, no one, I should imagine, wishes to interfere with; but there are many labors occurring in general practice in which there may be no mechanical obstacle to the passage of the child, no great rigidity of the os, no apparent ill health, nothing at first sight to remove them from the ideal class of natural labors, but in which the natural powers are rendered useless or next to useless, the patient becomes exhausted without having arrived at a satisfactory result, and after many tedious hours recourse is at last had to the forceps, from the fact that the patient is fast becoming worn out by fruitless efforts. These cases are generally those of strong, healthy, but nervous women, surrounded by silly, helpless, tactless relatives, where possibly no previous experience of her medical attendant has awakened a sense of confidence in him. And here I must beg the forbearance of the older members when I say that a young man of no very imposing appearance finds that the assurance of his teacher is scarcely true, that a quiet, confident, pleasant manner is always sufficient to bear up against and outweigh the accumulated anxiety of patient, mother, and mother-in-law, sisters *et hoc genus omne*, especially if some one is good enough, as she often is, to relate a hair-raising tale of recent midwifery horror.

There are other labors, too, commonly described as protracted labors from inertia of the uterus. I need not say much about these, as their description may be found in any text-book. In this class of cases the plan I am about to recommend will also be found useful. But before explaining this allow me to call your attention to the remedies already advised by authorities. I cannot find that much has been said with reference to the first class beyond the moral treatment already alluded to.

With reference to inertia, Dr. F. H. Ramsbotham advised warm diluents, stimulants, ergot and borax, external warmth, external pressure by hand or bandage, friction and electricity, change of position; Denman—warm diluents, weak brandy and water, ergot, bleeding, laxatives, exercise, erect position, and exhortations to patience; Playfair recommends enemata if rectum is loaded, rupture of membrane if uterus is unduly distended, alteration of position, opiates, chloral, ergot, and pressure on uterus externally, and, if all fail, forceps. I might enumerate other authors; but as their advice is practically the same, and as we have, by this selection, included the representatives of the old and new school, I refrain.

When I first began to think about these cases my attention was drawn to two facts which doubtless have been often noticed by members, of all labors. They were these: First, that the lower the head comes, and therefore the greater extent of the vagina pressed upon the stronger and more uncontrollable

become the expulsive efforts, until when the head well dilates the vulva it appears impossible for the mother to check the full force of her propulsive powers; uterus, abdominal walls, diaphragm, all unite in one steady push until the head passes. Looking at this, I was struck by the likeness of the movement to that seen in the passage of feces by the rectum or the swallowing of food by the oesophagus—distinctly reflex acts; and this irresistible conclusion forced itself upon my mind: In labor the child's head is the natural stimulus to the vagina, and through it to the uterus; the action, commencing as an automatic one, becomes a mixed automatic and reflex one as the head advances, and the greater amount of vaginal surface pressed upon the greater amount of reflex force is called out to assist. The second fact I noticed was this: that if you can succeed in getting the woman to bear down during the whole pain, more progress is made during the last portion than during the first.

Suppose a case of the first kind I have mentioned—a restless, irritable woman surrounded by ignorant, prejudiced nurses with a nervous horror of draughts, forceps, etc. I think you can unostentatiously, quietly, without causing observation, hasten your case. I know and can understand the objection that will be raised to the word “hasten,” and I deprecate from the first any wish to hasten the labor merely for our own convenience or for any other reason than that of the advantage of the mother and child: but this, I think, is best consulted in some cases by cautious interference.

Now, in considering these protracted labors and their probable end in exhaustion, the question is not “where is the obstruction, and how can I remove it?” inasmuch as if there is any amount of obstruction the case is entirely removed from this category; but rather, “what natural powers have we? why are they not sufficient? and can I do any thing to *augment them* now, instead of substituting something for them when they are used up?” The answer has so far been, with one exception, “Yes, by means tending to augment the automatic action of the uterus—ergot, pressure externally by hand or bandage.” I say, by all means; though with regard to ergot we all know how uncertain a remedy it is; use bandages externally, if you like, and have a nurse you can depend on. But in addition to this you have the power of exciting a reflex action of the uterus—a method of bringing on, elongating, strengthening the pains—a method which responds to your stimulus in exact ratio to your application of it, and one which may always be relied on, because it follows the lines of nature, the eternal teacher of us all.

I said that the child's head was the natural stimulus to the maternal vaginal fibers. As it descends it involves more and more peripheral ends of nerves in its pressure; reflex currents are excited, and the uterus contracts more and more strongly. Can we imitate this? I think we can. If you pass two fingers of the right hand into the vagina, and place the tips slightly divergent upon the posterior wall,

wait for a pain, and, when it begins, slowly and with measured force make gradually descending pressure upon the rectum, passing downward over the perineum, and so to the vulva. As the pain abates, gradually take off your pressure, and during the interval do not press at all. In this way you cheat the uterus, you cheat the patient into acting as though the child's head were lower than it really is. Members may smile, but I can assure them that over and over again, by adopting this expedient, I have found the nervous cry and the useless shrink of these nervous patients disappear, and, instead of drawing back and as of set purpose deliberately thwarting the natural efforts, the patient has settled down to her work and been saved from forceps. I firmly believe that in this way the forceps have often been rendered unnecessary, where but for this plan the patient would have exhausted herself, and the use of instruments would have been unavoidable.—*E. Stanmore Bishop, M. R. C. S., L. R. C. P., in London Med. Examiner.*

#### CLINICAL LECTURE ON THE RATIONAL TREATMENT OF TYPHOID FEVER.

Delivered at the University Hospital, by WILLIAM PEPPER, A.M., M.D., Professor of Clinical Medicine in the University of Pennsylvania.

T. A., a sailor, aged 25, a native of Canada, was always hale and hearty until last summer, when he had an acute attack of dysentery, which lasted ten days. He fully recovered from this, however. On November 23, while cruising about Boston, he was taken ill a second time, and went to his bunk on the 24th, complaining of dizziness, general weakness, and aching in his bones. He was admitted to the hospital on November 27. His cheeks were flushed, his temperature  $103\frac{1}{2}^{\circ}$ , and his pulse 130. There were slight bronchial râles over his chest, and some cough. His tongue was yellowish-white; his bowels quiet, but easily moved. His belly was tympanitic. At first no spots showed themselves. There has been no epistaxis from the beginning of the attack. There was creeping fever in the morning, and always a considerable rise of temperature towards night. I began the treatment by the administration of full doses of quinia, thirty grains daily, at the rate of from five to ten grains every two hours, up to the production of marked cinchonism. This treatment, to my great surprise, had no influence whatever upon the fever, his temperature running up to  $102^{\circ}$ ,  $103^{\circ}$ , and  $103\frac{1}{2}^{\circ}$  on November 30. At once it became evident to me that this was a case of typhoid fever, and my treatment was accordingly modified.

On December 10, the eighteenth day of the attack, the temperature was as high as  $104\frac{3}{4}^{\circ}$  in the evening, and the characteristic rose spots were out all over the abdomen. From the beginning of the fourth week, however, the improvement was rapid and the temperature made a steady “dead drop,” until on December 15 the thermometer in the mouth marked  $99\frac{1}{2}^{\circ}$ . On December 17 the pulse was 72, and the temperature  $98\frac{1}{2}^{\circ}$ . The mind was clear, and but very slight nervous symptoms were present. On

Dec. 20, however, there was a sudden rise of temperature to  $102^{\circ}$  in the evening, running down to  $101^{\circ}$  the next morning, and then up again to  $103^{\circ}$  the following evening. This was evidently a relapse, the temperature-chart bearing a very close resemblance to that of the second week of the original attack. Later in the course of this relapse there was a sudden fall of temperature to  $97\frac{1}{2}^{\circ}$  one morning, accompanied by a copious hemorrhage from the bowels. On that evening the temperature was  $102\frac{1}{2}^{\circ}$ . Since that time the patient has been slowly but steadily improving, until to-day his temperature is normal.

Before proceeding to discuss the treatment, let me call your attention very briefly to the symptoms of typhoid fever. First, as regards the temperature. This usually begins at  $99\frac{1}{2}^{\circ}$  in the first week. As the disease progresses the temperature mounts up and drops down, falling each morning, but not quite so far as on the preceding morning, and rising each evening higher than on the preceding evening. The temperature on the seventh day generally stands at  $101^{\circ}$  in the morning and  $102\frac{1}{2}^{\circ}$  in the evening. In typhus fever the rise of temperature is not gradual, but very rapid, running right up to  $102^{\circ}$ ,  $103^{\circ}$ ,  $104^{\circ}$ , even higher. In the second and third weeks of typhoid fever the temperature is fairly uniform, though high, with a daily variation of from  $1\frac{1}{2}^{\circ}$  to  $2^{\circ}$ . At the end of the third week the temperature begins to fall, showing a correspondingly lower temperature each morning and evening. These data are of great value in discovering whether the fever is running its proper course. In malarial fever there is a complete remission or intermission, according to the type of the fever. This is never the case in typhoid fever.

The other most characteristic symptoms of typhoid are those connected with the abdomen. The belly is usually very much swollen and tympanitic. There is either constant diarrhoea or an irritable state of the bowels, with cutting indomitable pains. As regards nervous symptoms, in the second week there is usually listlessness, dulness, and hebetude. The patient desires to be let alone. At night there is, perhaps, muttering delirium, or even violent excitement. The eyes are almost entirely closed. There is frequent twitching of the muscles. The tongue is tender and moved with pain. There is loathing of food, but rarely any vomiting. In the second and third week the pulse usually rises from 96 up to perhaps as high as 120 beats per minute. The frequency of the pulse, however, is not as great as in typhus and scarlet fever. The breathing is shallow and frequent, with some sonorous râles, perhaps over the chest. The eruption commonly appears on the seventh or eighth day, and consists of spots of a rose-red color about the size of the finger nail, seen usually on the belly somewhere between the nipple and umbilicus. These spots are but slightly, if at all, elevated above the surface of the skin. The spots are sometimes entirely absent throughout the fever. There is no proportion between the violence of the disease and the amount of eruption. One of the characteristic symptoms of this fever is profuse epistaxis; you see that this was entirely absent in

the present instance. There is very rarely excessive thirst; the mind is usually too much dulled in its sensations.

The most widely different views have been expressed as regards the treatment of this disease. Each view has had, for the time being, at least, its advocates. This divergence of opinion is very easy of explanation, since the disease may be entirely different in different epidemics. In some epidemics there may be very great mortality. Others may be comparatively mild. These statements are true of all epidemic diseases. I will not, therefore, mention any of the specific treatments. Typhoid fever, too, more than almost any other disease, is modified by personal idiosyncrasies. It is one of the longest of specific fevers, and, consequently, taxes the strength to an unusual extent. If it be among the poor, the mortality, for these very reasons, may be exceedingly great, much more so than if the epidemic had attacked one of the higher classes of society.

The basis of our intelligent treatment of syphilis is iodide of potassium and mercury. No one knows why these remedies are so valuable in that disease. In typhoid fever we know of no specific remedy; we must consequently treat the disease according to its morbid elements. We know that typhoid fever is a specific follicular ulceration of the alimentary canal. This is the most important element of the disease; most of its dangers are connected with this lesion, death resulting from either (1) excessive diarrhoea, (2) hemorrhage from the bowels, or (3) perforation of the intestinal wall. In addition to the above element we have to consider the blood-poisoning and the nervous symptoms generally present.

Are the ulcerated solitary glands and Peyer's patches the primary seat of the trouble? Does the blood become poisoned by septic influence from them, or is it poisoned by matters absorbed from other sources, and are the glands inflamed in removing the poison? To put the question more pointedly, are the glands ulcerated before the blood is poisoned, or ulcerated in removing the poison from the blood? In syphilis the glands of the body become enlarged as a consequence of blood-poison; whereas in diphtheritic sore throat the glands are swollen from the absorption of poisonous matters. We know that the poison of typhoid fever enters the system through the alimentary canal, that the glands of the intestines are *first affected*, then those of the mesentery, and then the other glands throughout the system. This lesion of the glands of the intestines must therefore have some connection with the origin of the disease. We have also to deal with a specific blood-poison in typhoid fever. This poison seems to consist of effete matter from the body of another person who has had the disease; at least this is the commonly received explanation. For my own part, I do not believe that this transplanted excrementitious poison is the only one, but think that the poison may be generated *de novo* from effete animal and vegetable matters.

The specific follicular catarrh of the intestines is of great importance in the determination of our treat-

ment, for there cannot be a rational treatment of the disease which does not take it into account. There has arisen of late years a school of practitioners which has pinned its faith to an entirely expectant treatment, waiting upon nature. This same expectant treatment might be just as well employed in all specific diseases, for it is tolerably certain that if all diseases were treated alike, with the same food and the same drugs, the proportion of recoveries would be about as high as it is under the most improved methods of treatment, provided, of course, that the number of cases considered be large enough. But this would not be intelligent therapeutics. Results, in a limited number of cases, are far better if we treat according to individual peculiarities than if we adopt one rigid form of treatment for all cases of typhoid fever.

And first, then, how shall we treat the follicular intestinal catarrh? There are, undeniably, certain remedies which exert a powerful influence upon this state of the intestinal mucous membrane. The first of these is nitrate of silver, which reduces the size of the enlarged follicles, relieves the inflammatory engorgement and allays the hyperæsthesia of the nerves. So, too, with carbolic acid and the sub-nitrate of bismuth. But of the three the nitrate of silver is the most easily administered, and the best tolerated by the system. It is also, undoubtedly, the most powerful in its soothing effects. Should there be any putrid element in the disease, carbolic acid should, of course, be used in place of the silver. In the vast majority of cases which have been under my care I have employed the nitrate of silver. This may be administered in doses of one-fourth of a grain four times a day. This treatment should be persevered in until the ulcers have entirely healed. Such a small amount of the drug can in no instance cause any discoloration of the skin.

Not only have we to subdue the ulceration, but also the resulting diarrhoea, which is occasionally excessive. If the discharge from the bowels is composed of small, semi-solid stools, it may with perfect propriety be disregarded, but if the stools are watery and large it must be checked. For this purpose I have been in the habit of using opium in pill-form, combined with the nitrate of silver. I give from one-quarter up to one grain of the powdered opium three times a day if the symptoms are urgent. If the bowels instead of being loose become constipated, I am accustomed to order belladonna conjointly with the nitrate of silver.

Then as regards the proper diet when this catarrhal inflammation of the intestines is present. The food must be, of course, as digestible as possible. Milk is the best diet in such conditions. If the curd appears in the stools, the milk should be diluted with water or lime-water. Of this mixture of milk and lime-water three ounces may be given every two hours, or a little over two pints in the course of the twenty-four hours. When the bowels are torpid, beef or mutton broth may be given alternately with the milk, though neither of these is any thing like as nutritious as the milk.

Indeed, as has been very thoroughly proven by Dr. Horace Hare, in experiments made at the University laboratory, beef boiled in the good old-fashioned way in a bottle of water, gives us a resulting solution which contains only about one-fourth of one per cent. of nourishing material. The beef tea thus manufactured is chiefly a solution of the salts of meat, and is therefore not nutritive, and only valuable as a stimulant to digestion. But there is another way of making beef tea, which gives better results. Take a quantity of tender meat, and, after cutting off the fat, chop it up fine, put it in a bowl, pour a pint of water over it, and let it stand over night. It may possibly be well to keep the water just on a simmer: do not raise the temperature above  $140^{\circ}$ , however, or you will coagulate all the albumen, and so either leave it on the sieve in straining, or introduce it into the stomach in the form of curds. After this simmering solution has been allowed to stand over night, pour it into a pipkin and heat it again gently, with enough salt to give it flavor, and, if necessary, add a drop or two of muriatic acid. Then pour it out over a hair sieve into a jar. The resulting solution will contain all the nutriment possible, and is the most valuable kind of stimulant and laxative.

Do not fail to recognize the fact that when the fever is high the patient needs all the food he can take. Acting upon this principle, I am in the habit of giving food freely in typhus fever. In typhoid fever, however, we must be careful that in allowing food we do not further irritate the already inflamed intestinal tract.

The poisoned state of the blood in this disease must be controlled by means of quinia, nitromuriatic or salicylic acid. Quinia is, of course, indispensable. Salicylic acid is valuable as a disinfectant and antiphlogistic: it is, however, slightly irritant. I should advise its use only where there is some putrid discharge joined with high fever. I give quinia in the form of the sulphate as a routine treatment, for it (1) neutralizes the effects of the septic poison in the blood, (2) acts as a good tonic to the muscular and nervous systems, (3) tends to check febrile action, and (4) removes any malarial element that happens to be present. I never administer the enormous doses given by German physicians. It is very true that such doses will break down high fever, but joined with this good result there is so much unnecessary irritation of the mucous membrane produced that heroic treatment such as this should only be adopted as a last resort. I am in the habit of giving about twelve grains of quinia in the course of the twenty-four hours.

How are we to combat the febrile action itself? We have already tried to prevent it by means of careful diet, nitrate of silver and quinia. I believe in keeping temperature down by preventive measures rather than by the cold bath, which I place among the very last resorts of the physician. It is almost unnecessary to say that I am wholly opposed to the indiscriminate cold bathing in typhoid fever so much in vogue in Germany at the present day.



When the temperature runs up in spite of our drugs, I would advise in the milder cases, spongings of the whole body every two hours,—the sponges to be squeezed out of a mixture of water and bay rum, at a temperature of from 60° to 80°. If this does not succeed (it rarely fails), and the patient's temperature mounts up to 104° or 105°, then he must be wrapped in sheets wrung out of cold water. If the temperature still runs up to such an extent that life is threatened, I would then have patient placed in a cool bath until the bodily temperature is sufficiently reduced. So far, therefore, from regarding cold baths as a proper mode of treatment, I would have them reserved for the gravest of all conditions only, and never employ them until the danger-point was reached. Before the local lesions set in, we can attack the fever more boldly, but when the fever in subsequent stages runs high, it is of the nature of a sympathetic fever, largely dependent upon the amount of intestinal lesion, and therefore the use of cold baths at this period is attended with great risk. If the cold bath is to be used at all (except as a last resort and when temperature can be reduced in no other way), the proper time for it is during the first seven or ten days in cases where the temperature rises above 103° and is not controlled by frequent spongings, large doses of quinia, diaphoretics, etc.

As typhoid fever lasts so long, there is, of course, a great deal of prostration attending it, and stimulants are quite often called for. Now, I want to say a word to you with regard to the use of stimulants in this disease. Do not fall into the common habit of administering stimulants to a patient simply because he has typhoid fever. Stimulants are only demanded for the relief of certain symptoms. Children before the age of puberty are usually able to pull through an attack of typhoid fever without any stimulus. This patient before you has been carried safely through both first attack and relapse without a drop of stimulus. Stimulants are, as a general rule, only needed in the case of an old person, or to meet certain indications. These indications I may conveniently arrange under four heads, viz., (1) ataxic nervous disturbances, such as sleeplessness, twitchings of the muscles, maniacal delirium; (2) circulatory disturbances, such as feeble and rapid pulse, and feeble development of the first sound of the heart; (3) profound asthenia, as shown by great tremulousness, inability to make any movement, and tendency to slide down off the pillow; (4) dry and brown tongue, with sordes on lips, teeth and tongue. You will usually be able to note at once the development of any of these symptoms, which of course render stimulation absolutely necessary if the patient's life is to be saved. In using stimulus it is well to begin with the milder forms, such as wine whey. This should be made in the proportion of one part of sherry to three of milk, and as much as a gill or half a pint of it may be given in the course of three hours. If the symptoms increase, however, it is a sign that stronger stimulus should be employed, and whiskey must then be given. I

usually give whiskey in lime-water and milk, the lime-water preventing the coagulation of the milk by the alcohol. I make up the mixture in the proportion of one tablespoonful each of whiskey and lime-water to every three ounces of milk. In this form half an ounce of whiskey may be given every hour. Indeed, in some very serious cases I have administered as much as an ounce of whiskey every hour for a day and night in the crisis of the disease. If your stimulation is doing good, you will be able to note a diminution of all the serious symptoms. If, on the other hand, the symptoms increase, you had better reduce the amount of stimulus given. Some authorities advise the use of stimulus to a slight extent in all cases after the middle of the second week of the disease. The occurrence of hemorrhage, pneumonia, or severe bronchitis always demands prompt stimulation. In some cases stimulants may prove a cause of irritation to the ulcerated glands, and so increase the secondary fever.

Before closing, there are a few points which I desire to impress upon your minds regarding the complications of typhoid fever and their treatment. This man is a very good illustration of one of these complications, viz., relapse. Relapses may occur at any time during the period of convalescence, and are always to be regarded as true second attacks of the disease. In the diagnosis of relapse be careful to search for any local cause, such as pneumonia or bronchitis; if none such can be found, you may be pretty certain that the relapse is a true one. It is very easy to understand how a relapse may occur, when we consider that it is nothing more or less than a return of inflammation to the glands of the intestines: some of the ulcers have healed, perhaps, and others have not progressed quite so far, when another crop of glands go on to ulcerate. When relapse appears, treatment must be resumed at once, the diet restricted, and the same general watchfulness had over the state of the case as during the course of the first attack.

This man's relapse was heralded by a series of copious hemorrhages from the bowels. Hemorrhage, as a complication of this disease, must for a moment engage our attention. Hemorrhage may take place at any time while the bowels are ulcerated. It generally occurs at one of two periods,—either early in the attack, when it is of little or no consequence, or later, when the sloughs are thrown off from the ulcers. Hemorrhage at this time is always a serious matter, it may be very fatal, producing death in the course of a few moments. Be careful, therefore, to have every dejection examined by the nurse.

The treatment of hemorrhage is by absolute rest in bed for twenty-four hours, and by the administration of opium to produce absolute quiet for the alimentary canal. In cases of hemorrhage I am in the habit of giving opium by the mouth, or, better still, by the rectum. I prefer the solid opium, and prescribe one grain every two or three hours until the patient is gently under its influence. Then we have certain astringents which act locally. Of these, acetate of lead is perhaps the best: a suppository



containing three grains of this drug and one grain of opium may be given three or four times daily. Ergot, by reason of its action on the walls of the arterioles, is invaluable in such hemorrhage. It may be given by mouth, rectum, or hypodermically near the supposed seat of hemorrhage. The food taken should be very small in quantity and absolutely liquid. If treated promptly, in the vast majority of cases the bleeding will be promptly stopped.

The last and most serious complication is perforation of the bowel. This is also most likely to occur late in the disease when the sloughs are thrown off. Though not common, it can easily be produced by walking about, or eating indigestible food while the ulcers are unhealed. The symptoms are sharp pain, sudden collapse, sighing, breathing and thready pulse. It is more liable to happen in old than in young persons. No one ever got well who had a true perforation. The inflammation may bring on peritonitis, and the symptoms of peritonitis may simulate those of perforation. Peritonitis must be treated by antiphlogistics, sedatives, perfect rest in bed, and a diet which leaves no residuum to irritate the bowels. Of course incision of the abdomen and suturing of the intestinal lesion is out of the question in cases of perforation, owing to the specific condition of the inflamed glands.

[January 25.—I bring the patient before you to-day entirely convalescent. His tongue is clean, his pulse about normal, his bowels regular, and his fever gone. There has been no return of hemorrhage. The man is indulging in a mixed diet and plenty of exercise. He has given up the nitrate of silver altogether. During the last day or two he has been taking cod-liver oil and iron to fatten him up.]  
—*Philadelphia Medical Times*.

#### NEW PROCESS FOR PLACENTA PREVIA.

(From the *Philadelphia Medical Times*.)

At a Conversational Meeting of the Philadelphia County Medical Society, Dr. J. S. Eshleman related a case of placenta previa which he had treated in consultation with Dr. I. McGuigan. They met soon after the first profuse hemorrhage had taken place. The pains were feeble, as is usual in these cases; the flow continued. The patient could not long survive it. The os would scarcely admit the tips of two fingers; it was from an inch and a quarter to an inch and a half in diameter. With Dr. McG.'s consent, he at once applied the forceps and brought the child's head firmly down upon the placenta, compressing it as well as the uterine sinuses, with the effect of instantly arresting the flow of blood.

Feeble pains were now stimulated, and aided by equable traction upon the instruments. The forefinger of the left hand was frequently interposed between the head of the child and the inner surface of the os to graduate the amount of force applied by the forceps held in

the other hand, and, aided by the uterine efforts, the os in time began to yield. The uterus descended under the traction somewhat, but less than is often witnessed in natural labor. The case was conducted gently, each effort followed by rest in imitation of natural labor, and terminated in about one hour. There was no perceptible loss of blood, nor was there any concealed or post-partum hemorrhage. The child, though faint, soon rallied. The uterus closed softly upon the placenta, a portion of which remained firmly adherent near the os; the remainder lay protruding from the organ in a somewhat crushed condition, yet there was no hemorrhage. After this condition was carefully examined by Dr. McGuigan also, he proceeded to dislodge the placenta, not by introducing the hand, "paring" or tearing it off, but by external pressure, moulding, and manipulation. Mother and child are doing well. \* \* \* \* \*

Dr. Goodell asked Dr. Eshleman to explain how the os was made to admit the forceps.

Dr. Eshleman replied that the diameter of the os was less than the width of the blade of the forceps, but he was able in the absence of pains to elevate the head of the child, when the blade of the forceps would elongate the circular opening into the shape of a button-hole, so as to admit its passage; the second blade, being somewhat narrower, will pass over the shank of the first and enter the same aperture. It is surprising to test how small an opening will admit the forceps, and equally so how large a one is required to admit the hand.

In reply to Dr. Hamilton, he said that ergot was given in the hope that it would favor contraction of the emptied womb, but its effects could not be waited for to aid labor or depended upon to arrest hemorrhage.

Dr. McGuigan, being present, was asked to give his statement of the case reported by Dr. Eshleman.

He stated that the day but one prior to her delivery, he found blood issuing from the vagina. She had lost a previous gestation by hemorrhage. The cervix was three-quarters of an inch in length, and he could feel the fetal envelopes, but not the placenta. Two days after, he found her bleeding, and in regular labor; the os open three-fourths of an inch, the membranes intact; the placenta could be felt three-fourths of an inch from the external os on the left side, and detached for the space of two inches. The pains were quick and forcible; the head was not engaged. He punctured the membranes when the pains became feeble and slow. The bleeding was not continuous during the two days mentioned.

Dr. Atkinson said that the occurrence of placenta previa in two succeeding pregnancies was exceedingly rare. Nor was there any

reason to expect such a complication to occur again because a patient had once suffered thus.

In the only case that he had seen in which there was placenta previa, it was almost completely central. There were no contractions. Ergot appeared to have no effect, although freely administered. He tore through the placenta, put on the forceps, and thus delivered. The child had been dead for some time. The woman did well.

#### BROWN SEQUARD'S TREATMENT OF EPILEPSY.

Dr. James B. Ayer reports (*British Medical and Surgical Journal*) twelve cases treated by the following prescription for two years:—

R Sodii bromidi, potassii bromidi, ammonii bromidi, aa ʒiij; potassii iodidi, ammonii iodidi, aa ʒiss; ammoniæ sesquicarb., ʒi; tinct. calumbæ, fʒiss; aquæ, destillat. ad fʒviij. M.

Full dose one and a half drachms before each meal, and three drachms at bed time.

*Results.*—In four cases very satisfactory: reduced to a single attack in forty-six months, thirty-one months, twenty-two months, and sixteen months respectively. In five cases number and severity of attacks both diminished. In one case severity diminished, number unchanged. In two cases no change in number or severity. In eleven cases there has been marked improvement in general health and mental condition. In one case there has been a slight improvement.

#### ON THE TREATMENT OF PSORIASIS.

By Dr. Balmanno Squire, Surgeon to the British Hospital for Diseases of the Skin, &c.

Phosphorus has recently awakened fresh attention as a therapeutical agent. It has especially been recommended by Dr. Broadbent as a remedy for leucocythæmia. This suggestion, however, after a particularly patient investigation of it, appears to have fallen through. Dr. Broadbent incidentally remarked, in a discussion which ensued at the Clinical Society, on some improvement which seemed to him to have taken place in a psoriasis which occurred as a complication of one of his cases. It is possible that the discouragement which attended the further investigation of the action of phosphorus in leucocythæmia may have been the cause of this incidental suggestion having been neglected. However, phosphorus had, I believe, prior to that time been tested by Dr. Hardy, of Paris, with results which afforded him some encouragement; and, subsequently to the date of the case I am about to report, it has been tried by Dr. Whipham at St. George's Hospital, but with what result it is not quite easy to understand from his description. However, since his paper (published in the *Medical Times* of September 22nd, 1877) is mainly devoted to the confirmation of my

original advocacy of chrysophanic acid ointment in psoriasis, on this account possibly the effect of the phosphorus has been apparently less carefully attended to by him.

During the month of March, Dr. Whipham gave three times a day to a girl of 15, who had psoriasis, a pill containing one-twentieth of a grain of phosphorus. On April 1st, he "found that the psoriasis was rapidly disappearing. The improvement, however, was of very short duration, and, on May 31st, 1877, the eruption was extending on the limbs and trunk;" but Dr. Whipham leaves one in uncertain doubt as to when the phosphorus was left off. Further on in his paper, he again refers to this same case thus: "The psoriasis was disappearing under the use of phosphorus, which was commenced in March, 1877. By the end of May, however, the disease was nearly as bad as ever, and it was evident that the drug was of no use in relieving her ailment." One is, therefore, left with this choice: either that the good effect of the phosphorus went off because the use of the phosphorus itself was discontinued, or that the phosphorus, like Penelope, undid in May what it had done in April, or at least would not do in May what it had done in April. Dr. Whipham eventually cured his patient of what on May 31st was "a copious eruption of psoriasis over the trunk, arms, and legs," by the exclusive use of chrysophanic acid ointment, with the following result; namely, that, "on June 21st, exactly three weeks after the commencement of chrysophanic acid ointment," he found that, "with the exception of one or two spots, each rather less than the size of a pea, on each wrist, she was quite free from all trace of the skin-disease." On July 22nd, he again "saw her, and found all traces of the eruption gone and her skin natural. She had discontinued the ointment for some weeks." He adds that "it was not without a feeling of despair that I had recourse to chrysophanic acid; the result, however, and the rapidity with which that result was brought about surprised me extremely, a surprise which is not lessened by the fact that the girl had suffered from the skin-disease for five years and a quarter at the time when the acid was first employed, and that she was entirely free from psoriasis in twenty-one days." Dr. Whipham's surprise was only natural. The efficacy of chrysophanic acid in psoriasis is certainly one of the most astonishing facts in modern therapeutics. I refer incidentally to this part of his paper because it was in this *Journal* that chrysophanic acid was first made known to the medical world as a remedy of the utmost efficacy in psoriasis, and for another reason: because it fell to my good fortune to make that particular discovery. I regard Dr. Whipham's observations as an important addition to the other confirmatory evidence which, prior to his paper, had already appeared in the columns

of this Journal. The wide publicity which was given to my observations by their appearance in the Journal has caused the remedy to be now in extensive use for the treatment of psoriasis in all parts of the world, whilst one drawback to its use which I had feared, has now been removed. I refer to its price. Chrysophanic acid which, in December last, could only be obtained at the price of ten shillings an ounce, is now sold for four shillings an ounce. I have little doubt but that it will speedily become much cheaper.

It will be seen from the following report that, in February and March of this year, I had a case very similar to that of Dr. Whipham's, which latter extended from March to July, and that the treatment was very similar in the two cases.

Betsy D., aged 13½, was sent under my care as an in-patient of the British Hospital for Diseases of the Skin by her medical attendant, Mr. Essex, of Pontypool, in Wales. She had been affected with psoriasis, for only two months; but the skin of all her limbs and body was copiously covered with psoriasis, the patches on the posterior aspect of the arms and forearms being the largest of all, and many of them being of very considerable size. She had also two or three very inconsiderable spots of psoriasis on her face.

On February 22, after a careful map had been taken of every part of the eruption by means of a complete set of my "outline drawings," she began to take phosphorus "perles;" that is to say, the little French capsules of that name, which contain each one-thirtieth of a grain of phosphorus dissolved in oil, and which are to be readily obtained of any chemist. She commenced by taking only one of them three times a day.

Feb. 23. The dose was increased to two perles three times a day.

Feb. 26. The girl had taken the increased dose for a few times; complained of severe and long continued pain at the epigastrium after each administration. The dose was now reduced to one perle three times a day.

March 6. On this, the twelfth day of treatment, many of the smaller patches had almost completely disappeared, and the others, even the larger ones, had lost their scales to a great extent; had become fainter in colour, and flattened at their central portions, leaving only raised margins. Since February 26th, she had taken only one perle for a dose. No pain had been felt. She was now ordered two perles for a dose again.

March 8. She had now taken six doses, each of two perles, without bad effect, until this morning, when, on taking a walk after her dose, she complained of a pain in her stomach. The dose was, therefore, reduced again to one perle.

March 14. She had taken one perle since the last report till now. The eruption was certainly much fainter, but scarcely any additional patches had completely disappeared.

March 27. She had taken two perles three times a day until now since March 14. Now the patches on the chest and upper part of the back had nearly all entirely disappeared, i.e., they could not any longer be indentified by means of the map taken on February 22. The largest patches of all, viz., those on the forearms, had quite vanished, except at the actual margins, leaving only a slightly livid blue stain, and being quite free from desquamation. Many of the patches on the thighs were gone for the greater part of their area. Those on the legs had undergone the least alteration, but have lost their scales. The diseased area, which used to itch very much, had not done so for the past two or three weeks, except quite recently on the knees only, where a few small fresh patches had appeared. The perles have caused no pain in the stomach and no diarrhoea. She was now ordered to take three perles three times a day. She had not washed since the commencement of the treatment. This regulation was enforced in order that any removal of scales might be clearly due to the action of the phosphorus alone.

April 3. All the large patches on the arms had now lost their margins, which were broken and simply dotted, and the general condition of the eruption seemed improved, though a few fresh spots had appeared, while others had gone. As regarded the buttocks, the outer surfaces of the thighs also, and the legs (the latter more especially), the eruption was somewhat more copious than before. The perles caused no inconvenience. She was now ordered to have four perles, instead of three, three times a day.

April 12. She had taken four perles for seven days only, when pain in the stomach came on. From that time the perles were altogether discontinued. The eruption did not seem to have varied notably. The impression produced on my mind was, that the phosphorus had attained its maximum of effect, or nearly so; or, anyhow, that it was a much slower remedy than efficient local applications often proved to be. She was now ordered to discontinue the phosphorus, and use only chrysophanic acid ointment (acidi chrysophanici 3 i j; adipis 3 j).

April 21. Very considerable improvement was obvious, only faint traces of the eruption remaining, except on the nates and on the legs below the knees.

May 9. Every portion of the eruption had disappeared, the only traces remaining of it being faint stains on the front of the legs and on the knees and elbows.

May 22. Since May 9, she had used the

chrysophanic acid ointment (after first washing the skin each time with soft soap and warm water) twice a day to the legs only. No inflammation had resulted from this application, and the patient was everywhere quite free from all traces of the eruption.

*Commentary.*—It will be seen from the report that this case, not only as regards the nature and extent of it, but also as to the treatment pursued and the result of that treatment, very closely resembles Dr. Whipham's case, and that it occurred at about the same time. Each patient was a healthy girl at about the age of puberty. In both cases, the eruption was very copious, although in Dr. Whipham's case it was of much longer standing than in mine. But, that circumstance, according to my experience, makes little or no difference as to the difficulty of curing the disease, although I am aware that the contrary opinion is generally entertained. In both instances, the case was treated at first by phosphorus alone.

Dr. Whipham's case was treated by means of one-seventh of a grain of phosphorus in the twenty-four hours throughout (for apparently two months), with marked improvement for the first month, but with a return to the original condition at the end of the second month. By the way, is Dr. Whipham quite sure that his patient continued to take the pills? I am sure that my patient took the perles. Mine was an in-patient, and the matron of the hospital administered in person every single dose. Dr. Whipham's patient was an out-patient, and phosphorus pills are apt to cause disagreeable eruptions tasting of phosphorus.

My case was treated by one-tenth of a grain of phosphorus in the twenty-four hours for the first twenty days, during four of which the dose had been increased to one-fifth of a grain *per diem*. During the next fourteen days, the dose was maintained at a fifth of a grain in the day; for the ensuing eleven days the dose was augmented to three-tenths, *i.e.*, nearly a third of a grain a day; and, for the remaining seven days, the dose was increased to two-fifths, or nearly half a grain a day; making in all fifty-two days of treatment by phosphorus; namely, about the same period as Dr. Whipham's course of phosphorus treatment, my patient, however, taking on the whole considerably more phosphorus than did Dr. Whipham's. The result of the phosphorus in my case was that, after thirty-three days' use of it, the patient had during the entire period steadily improved, so that, at the end of that time, she had lost the greater portion, or at least quite one-half of the original area of her eruption as it had existed at the commencement of the treatment.

During the next fourteen days of phosphorus treatment, notwithstanding an increase of the dose, the eruption for the first seven days even

increased somewhat, and, for the remaining seven days, remained at about a stand-still.

The conclusion I draw from the two cases is that, after about a month's employment of the remedy, the antagonism of phosphorus to psoriasis finds its equilibrium; and that the antagonism in question, although real and obvious, has, nevertheless, a limit which falls short of the complete cure of the disease. Nevertheless, I regard phosphorus as an important and valuable addition to our means of curing psoriasis, and I am induced to think, from the results of further experiments that I have since made with it, that it may be found to be an internal remedy of greater efficacy than arsenic in the treatment of this disease. However, as I said before of chrysophanic acid, the value of it is a question to be determined, not by the results obtained by one or two observers but by the general verdict of the profession.

I ought here to draw attention to the fact that my case shows that the dose of phosphorus when even, as here, it is at first tolerated only with difficulty, may be *gradually* increased even in the case of a child to a dose considerably beyond the limit which is commonly assigned to it. In short, that if caution be exercised, four times the ordinary (one-thirtieth of a grain) dose, namely, as much as one-eighth of a grain three times a day, may be quite safely given without inconvenience of any kind. I have since given this latter dose in a large number of cases of psoriasis.

As to the chrysophanic acid ointment treatment with which both Dr. Whipham and myself made amends for the deficiencies of phosphorus, Dr. Whipham's patient was nearly cured by it in three weeks, and mine in nine days. In both cases, after a further use of the ointment (Dr. Whipham seeing his patient a month and I eighteen days subsequently), we found our patients quite free from eruption.—*British Medical Journal*, Nov. 3, 1877 p. 620.

#### TREATMENT OF ECZEMA IN CHILDREN.

Mr. J. Dixon remarks on this subject, in the *British Medical Journal*, that the treatment in this disease must be topical, for the relief of local irritation. The local treatment that he has always employed and found successful, has been directed to the exclusion of air, and the prevention of desiccation, thus alleviating local distress. The scabs that form from drying of the exudations are, perhaps, one great cause of keeping up the disease. For the purpose of maintaining constant moisture, he frequently employs a plan recommended by the late Professor Bennett. A piece of lint, saturated in a very weak alkaline solution (thirty grains of bicarbonate of soda to a pint of pure water), is applied to the part affected, and covered with oiled silk or gutta-percha tissue. The dressing

is changed twice a day. This mode he has employed with universal success in adults. The only case in which he has used it in youth was in that of a girl, thirteen years of age, where the disease involved the whole of the face; a cure was effected in about a fortnight. But in addition to the local treatment, the patient had three minim-doses of Fowler's solution thrice daily. Another form of local treatment that he employs is the use of a lotion consisting of oxide of zinc, ninety grains, glycerine, half a fluid ounce, water, to eight fluid ounces. This to be applied twice daily, and the part to be covered by lint and gutta-percha tissue. Of internal remedies, arsenic in the form of Fowler's solution is given, either simply in water, or in conjunction with other tonics and alteratives, as iron and iodide of potassium. He also, in many cases, gives cod-liver oil.

#### FEEDING BY THE RECTUM.

Dr. Austin Flint, in a paper of extraordinary interest and practical value in the *American Practitioner* of January, on Rectal Alimentation, shows that life may not only be thus prolonged a few days, but that persons may live for weeks and months and even years by this method of nutrition alone. More than this, and it seems almost ludicrous, some patients having been fed in this way for a considerable period were quite disinclined to return to the usual mode of eating. The cases recorded, except the first, came under Dr. Flint's observation. Dr. Pierce's patient lived three weeks solely nourished by the rectum. Dr. Purple's patient lived three months on this form of feeding. Dr. Lusk's patient was sustained for seventeen days in the same way. Dr. McClain's patient maintained life by rectal alimentation for twenty-eight days, and for a year was fed in this way the greater part of the time. Dr. Flint's patient lived exclusively upon injections of essence of beef and milk, repeated every four hours for three weeks. The most extraordinary case is that furnished by Dr. Bliss of New York. His patient lived comfortably for fifteen months without other sustenance than that through the anus, and for much of the time for five years lived by this means. None of these patients died of inanition, and some of them increased in weight and strength. Where death occurred it was due to the disease with which the patient was suffering.

This treatment is applicable in cancer or ulcer of the stomach; stricture of the esophagus; gastritis; gastrorrhagia; the persistent irritability of the stomach, purely functional, occurring in women; invincible anorexia with loss of strength and weight; and when "from blunted mental perceptions or coma an adequate

amount of food can not be introduced into the stomach by voluntary deglutition."

The rectal diet recommended is as follows: Liebig's extract of meat, with milk; milk, either alone or combined with eggs, beef, mutton and chicken broths; and Leub's pancreatic meat emulsion, which is prepared as follows: from five to ten ounces of finely-chopped meat, and one-third of this weight of finely-chopped pig or ox pancreas, free from fat, are mixed with five ounces of luke-warm water. This mixture is rubbed in a mortar to the consistency of thick soup.

The quantity of food injected should be from three to six ounces, and the intervals between injections should be from three to six hours. If not well tolerated, tincture of opium or morphia in solution are added with advantage. The bowel should be relieved of its fecal contents before beginning the rectal feeding, by simple enemas, or, if not contra-indicated, by a laxative *per orem*. After this procedure no fecal discharge may occur for days or weeks, and yet no discomfort is experienced.

To quench thirst simple water is injected and the body is freely sponged. Should the rectum refuse the first injections of aliment, they should be continued, and in a short time are likely to be retained. Should the bowel become intolerant of the injections after they have been used some time, they should be discontinued for a day or two, and after this rest the rectum is likely to receive them kindly.

The nutritive injections should be tepid, and directly after their administration firm pressure on the anus by a sponge or napkin should be made until the desire of expulsion passes off. *Louisville Medical News*, February

#### TREATMENT OF DIPHTHERIA BY TURPENTINE INHALATIONS.

By C. EDEL, M.D., New York.

Before I enter upon the mode of treatment of diphtheria, it may not be inappropriate to give, in a few words, my opinion concerning the nature of the disease.

I regard it, in the majority of cases, as a local affection from the beginning, affecting the mucous membrane of the nose, pharynx and larynx, the fatal termination of the disease being brought by pyæmia. The latter may be either primary in cases where the poison has been absorbed by the capillaries of the lungs or the mucous membranes (and these frequently become fatal after a short duration, even without the formation of membranes); or the pyæmia may be secondary to the formation of membranes, and the poison is then taken into the system in the usual manner.

But we must distinguish this pyæmic fever from the reactive fever, common to all cases of diphtheria, and which I think is only an effort on the part of nature to eliminate the obnoxious substance.



The character of the disease has a close resemblance to the gangræna nosocomialis. If we have under observation a surgical patient, we may be certain about the favorable conditions of his wound as long as his temperature does not suddenly rise. When the latter occurs, all practitioners are aware that we must be upon our guard. It is not necessary that we find the wound in a bad condition immediately, but we are sure that this will follow after a short time, if the wound is not properly treated by disinfectants. If, however, this course of treatment is pursued, the temperature will soon become normal. The cases of secondary pyæmia in gangræna nosocomialis are relatively rare, since a more proper management of the wounds has been adopted, but they occasionally occur, and prove fatal in spite of the greatest care.

The object of my treatment is not to cure the primary pyæmic infection of the "malignant cases," or to cure the "secondary pyæmia" after the formation of membranes, but to prevent the absorption of the poison, the presence of which is indicated by the reactive fever.

Since the treatment of diphtheria by steam inhalations gives relatively the best results, I resolved to combine this method directly with a local disinfectant. For this purpose I use Tiemann's steam-atomizer in the following manner: I have the boiler half filled with water, add about fifteen drops of the oil of turpentine before each inhalation, and then close it. As soon as the vapor escapes, the patient is placed at a distance of three inches from the mouthpiece of the instrument. This distance I found more convenient than to apply the mouth directly to the mouthpiece, since the greater heat might prove injurious and the force of the stream would frequently make it inapplicable to children. Formerly I have used the turpentine with some water in the medicine cup, but this arrangement often fails, and I find it quite sufficient to put the turpentine into the boiler directly.

The inhalations are made every hour for about ten minutes, day and night.

This treatment I have applied in quite a number of cases, and thus far with the most favorable results. Recent cases were cured in twelve hours, i. e., the temperature was reduced and the sores in the throat were clean; in older cases it took sometimes twenty-four hours before the temperature became normal, and about forty-eight hours before the pharynx appeared perfectly clear.

I shall briefly relate a few of the more characteristic cases.

I. December 2nd.—W. W.—, a boy 6 years of age. When I first saw the patient he had been treated for three days with chlorate of potash locally, and tincture of iron internally. On inspection, the tonsils and pharynx were found to be covered by diphtheritic membranes. The boy complained of pain in the region of the sternum; his breathing was superficial, and he had very marked dyspnœa; his voice, however, was pretty clear. I continued the treatment for eight hours, but seeing that the infil-

tration had rather increased in extent, I resorted to the above described inhalations. They were continued during the night, and after twelve hours the patient expectorated a piece of membrane five and a half inches in length and one inch in breadth, which had undoubtedly occupied the whole extent of the trachea, at the same time the pharynx was nearly clean. The pain of which the boy had complained ceased immediately after the membrane had been expectorated. The microscopical examination revealed, besides some epithelial cells, the presence of fibrine, small, round cells, and the peculiar organisms called micrococci.

II. November 29th.—B. S., a girl 3 years old. In this case I performed tracheotomy half an hour after I was called, on account of the great dyspnœa. There were no membranes in the throat, and I regarded the case as one of croup. A few hours after the operation the tube could hardly be cleaned from very tough membranes plugging the inner opening. Next morning diphtheritic membranes were seen in the pharynx. I ordered at once the inhalations, but, of course, in this case through the tracheotomy tube. The inner tube was taken out and the steam passed through the opening in the superior curvature of the outer tube into larynx and pharynx. After having used the inhalations for twelve hours, the pharynx was clear, and some relatively thin matter was discharged through the tube. The child recovered entirely, with the exception of a paralysis of the vocal cords, which will probably be cured by faradization.

III. November 23rd.—M. R.—, a woman 40 years old, in whom the infiltration extended almost over the whole tongue and the greater part of the pharynx; after twenty-four hours the temperature normal, and about twenty-four hours later the mouth and pharynx clean.

IV. December 22nd.—E. M.—, 15 years old. Pharynx partly infiltrated; cured in twelve hours.

V. December 31st.—C. E.—, 5 years of age; membranes on both tonsils. Inhalations begun on the third day; one tonsil clear after twelve hours, but it took about two days before the membranes on the other tonsil disappeared, the parents having neglected to use the atomizer during the night.—*New York Medical Record*, Jan. 19.

#### TREATMENT OF DYSPEPSIA.

The following is the treatment adopted at the Demilt Dispensary, New York, as described by Dr. D. Lewis, in the *New York Medical Journal*:—

When there is constipation, we have found the rhubarb and soda mixture most useful—

|                  |          |
|------------------|----------|
| R. Pulv. rhei.,  | 3j       |
| Sodæ bicarb.,    | 3 iss    |
| Ol. menth. vir., | gtts. iv |
| Aquæ,            | 3 iv. M. |

Sig.—A tablespoonful before meals.

This alkaline mixture probably owes its efficacy to its stimulating action upon the gastric glands—a

property of alkalies which has been amply demonstrated by many experimenters. When an additional laxative was necessary, a compound rhubarb pill was ordered at bedtime, or, what is preferable in many cases, the pill of aloes, belladonna, and strychnia—

R. Ext. aloes, grs. ijss  
Ext. belladonnæ,  
Ext. nucis vom., aa gr. ½. M.

SIG.—One at bedtime.

In contrast with the above case are those patients who are anæmic, and complain of the symptoms common to that condition—loss of appetite, palpitation of the heart, intercostal neuralgia and headache. In some instances this condition is a natural sequence of prolonged dyspepsia, but is more commonly dependent upon other causes, such as bad hygiene, overwork, or malarial influences. Tonic treatment is here indicated, and the following prescription is usually effective:—

R. Quinæ sulph., gr. xij  
Tr. ferri chloridi, ʒ ijss  
Aquæ, ʒ iv. M.

SIG.—A teaspoonful in a wineglass of cold water, half an hour after meals.

An aloes and belladonna pill is occasionally required at bedtime.

Plasters have been often prescribed for intercostal neuralgia in these cases. Notwithstanding the prejudice against their use, experience here has proved them to be a valuable adjuvant in the treatment.

The belladonna-plaster (4x6) is the one most frequently ordered, and next in order the capsicum plaster (same size), as now kept by druggists. A pitch-plaster, with chloral hydrate sprinkled over its surface, was tried in several cases, but proved inferior to either of the others.

When there was irritability of the stomach (probably gastric), with nausea and vomiting, a bismuth mixture was often ordered—

R. Bismuth, subnit., ʒ iv  
Acid. nitric. dil., ʒ ij  
Tr. nucis vom., ʒ jss  
Aq. menth. pip., ʒ iv. M.

SIG.—A tablespoonful after meals. Shake well before using.

Since it has been pretty clearly demonstrated that bismuth acts mechanically by adhering to the mucous coat of the stomach, it is evident that a large dose should be administered. But the *very large* doses given by Lusanne, Menneret, and others (who gave ʒj per diem), no doubt hinder the excretion of gastric juice, thereby causing the cachectic symptoms which those observers found to follow its prolonged use.

#### SUGGESTIONS FOR THE TREATMENT OF SLEEPLESSNESS.

The following suggestions are taken from an article by Dr. W. A. Hollis, in the *Practitioner*:—

One of the most efficient means of inducing natural sleep is by the application of mustard poultices to the abdomen. In cases where sleeplessness

arises from natural worry, abdominal flatus, or other annoyances, this remedy is invaluable. Schuler states that large sinapisms applied in this way produce first dilatation and subsequently contraction of the vessels of the pia-mater in trephined animals. They may thus act as do pediluvia and warm compresses to the abdomen, by diminishing the amount of blood in the brain. The same writer says that cold abdominal compresses and the cold-pack produce at first dilatation of these vessels, and subsequently bring about an energetic contraction of the cerebral vessels, which lasts for some hours.

When the insomnia depends upon brain exhaustion, I have found that the administration of a tumblerfull of hot claret and water, to which has been added sugar and nutmeg, is of great value. Both the syrup and the spice, in this instance, are hypnotics, according to Preyer and Cullen. The mixture must be taken just before bedtime. In slight cases of wakefulness (as we all know) the reiteration of certain word sounds mentally, at the same time drawing a slow and deep inspiration between each word, is occasionally sufficient to produce sleep.

When sleeplessness is associated with acid dyspepsia, the alkalies and alkaline earths, especially the carbonate of magnesia and bicarbonate of soda, are very useful. In cases where the indigestion is owing to a sluggish peristalsis of the stomach and upper intestines, a full doze of Gregory's powder, or ten grains of the compound rhubarb pill, will remove disagreeable epigastric sensation and induce sleep.

The posture of the sleeper is of some importance. Many persons can sleep in their arm-chairs by the fireside, who court the fickle god of sleep in vain when lying upon their beds, some few hours later. The posture of the dozer and the surroundings of such a fireside nap sufficiently account for his somnolence on physiological grounds. When sleeplessness results from an over-worked brain and consequent paresis of the vaso-motor nerves, the stimulus of electricity has been resorted to. Althaus recommends this treatment. Two large pads are used with a Weiss' constant battery of from ten to fifteen cells. One pad is placed over the nape of the neck, the other, which can be conveniently made of an old reflector, and covered with chamois leather, is placed over the stomach. The anode is applied to the back, the cathode to the stomach, for about half an hour at a time.

In the wakefulness arising from defective cardiac power, on the other hand, it frequently happens that digitalis, by strengthening the force of the heart's beats, drives the blood into the capillary system more vigorously, and relieves the congestion of the central organs and the anæmia of the extremities. By thus equalizing the circulation, we diminish the necessity that previously existed for an increased flow of blood through the cerebral vessels, and so we promote sleep.

By many therapeutists the bromides of potassium, sodium, ammonium, and camphor are supposed to possess hypnotic properties, but my own experience

with these drugs is not confirmatory of such conclusions. These salts undoubtedly act as sedatives on the nervous system, and as such may occasionally induce sleep, but they cannot, I think, be ranked as true "sleep producers."

#### VASELINE AND SALICYLIC ACID IN OBSTETRICS.

In a recent number of the *Medical Record* I called attention to the use of vaseline and salicylic acid in the healing of wounds; in the present I propose briefly to mention some of the various uses for which this compound seems adapted. Vaseline is a hydrocarbon, made from petroleum by simple evaporation and clarification. It is very cheap, being worth only some forty to fifty cents a pound. It has no taste or smell. Its role as a protective against the action of the air is extensive, as in burns, excoriations, etc. It is one of the best of lubricants. Its use is simple, and especially in complicated labors is thus very advantageous. Internally, it seems to relieve irritation of the mucous membrane, and, when taken up by the system, though it undergoes no proper digestion, to act much in the same way as cod-liver oil. As a vehicle for more active agents, it is more generally useful than any other oil-like compound. Salicylic acid has of late come into vogue, and is now used for a great variety of purposes—principally as an antiseptic, to reduce the heat of the body, and in diseases in which there is a morbid material in the blood, as in rheumatism, and gout, etc. It is not expensive, costing from thirty to forty cents an ounce. I have tried several samples of different manufacture, and find that of Rossengarten, of Philadelphia, by far the best, while the German article that I have used has proved caustic and utterly unfit for many purposes. The American acid is in silky, white crystals, like quinine, has no caustic taste, and, mixed with vaseline, makes a homogenous ointment. The German is amorphous, looks like chalk, has a slight pinkish color and caustic taste, and, mixed with vaseline, makes a lumpy, irritating ointment, unfit for use.

With these few preliminary remarks, I will now briefly notice some of the many uses of these two valuable agents; and first as to their use in obstetrics. It has been my practice for some time back to use vaseline, with a grain or more of salicylic acid to the ounce, and scented with a drop of ottar of roses, in all vaginal examinations, instead of oil or soap. I believe I thereby more certainly avoid carrying infection from case to case that I should otherwise do. In first confinements it may be used in the first state of the labor, so soon as the woman takes to bed. I make use of a glass syringe, an inch in diameter, without a nozzle. With an instrument of this kind an ounce or more of the semi-solid vaseline can be introduced up to

the os, where it remains at the temperature of the body, in a semi-solid state. I use it in this way as a simple lubricant, and without the addition of the acid. If desirable, in certain cases, it can be combined with the extract of belladonna, and, after the labor is completed, with the extract of ergot, or, in case of hemorrhage, with the liq. ferri persulphatis, with all of which it mixes well. If it is desired to introduce it into the uterus, it can be rendered fluid by putting the bottle containing it into water of a temperature of 100° F., when it can be used with the ordinary uterine syringe. In the course of a labor I use three to six ounces, with the effect, as I claim, of shortening the first stage of labor and rendering the parts, especially in first labors, easily dilatable in the second stage, while, after the placenta is delivered, a small quantity of the vaseline, with the acid added, disinfects the discharges, and does much, it seems to me, to prevent purulent absorption. Indeed, if puerperal fever was prevalent, I should not hesitate to introduce it freely into the uterus immediately after confinement. To illustrate the healing qualities of this combination, I some time ago had an extensive rupture of the perineum in a primipara, due to an unusually large child and to an unyielding perineum. I passed two pins through the lips of the wound and a figure-of-eight around each, and directed the patient to introduce a little of the vaseline ointment two or three times a day on her finger. On the third day after, when I next saw her, on removing the pins I found the wound entirely healed. My cases are not sufficient to base positive conclusions on, but I am inclined to think that an hour or more can be saved in an ordinary labor by the use of the vaseline, and that the second stage will go on easier owing to a more thorough relaxation of the soft parts, and to the avoidance of unnecessary friction; and that its use, with the acid after labor, will do much to prevent puerperal absorption, and, in any event, will conduce to the comfort of the patient. In dilating the os with the sponge tent, I find that by coating it with the vaseline and the acid, (ten grains to the ounce), I can more readily introduce it, the tent not expanding at first, owing to the coating of vaseline; but, if held for a moment or two in place, it will remain without danger of its coming away, and will expand to the same limits that it would have done without the coating of vaseline, as can easily be proved by putting two tents in water, one coated and the other not. In erosions of the os, after the engorgement of the parts is removed by glycerine pads, the vaseline and acid ointment, applied on cotton-wool, will do much to effect a speedy cure, especially if alternated with the glycerine. There is one use for this ointment that I have not fully worked out. Physicians are frequently applied

to, to produce abortion. Recently, on the same day, two women came to me; the reason assigned in the one case was that the husband was syphilitic; in the other that pregnancy brought on violent attacks of spasmodic asthma. Of course I explained that the child had rights as well as the mother, but it was all that I could do to prevent one of these cases from going to a professed abortionist. In some cases of this kind prevention is better than cure, and I am inclined to think, from some experiments, that vaseline, charged with four to five grains of salicylic acid, will destroy spermatozoa, without injury to the uterus or vagina.

In conclusion, there are a number of uses for vaseline in the lying-in room and nursery. I make no claim to its being a "cure-all," but it is a great convenience, and its "role" is extensive. The ointment makes a good dressing for the umbilical cord. Vaseline answers better than oil or soap to remove the cerumen from the newly-born infant. Mixed with an equal weight of honey and ten grains of borax or of chlorate of potassa to the ounce, it answers an excellent purpose in case of thrush. The ointment alone, or mixed with ten grains of quinine to the ounce, quickly removes the small worms that frequently infest the anus of young children. In the excoriations of infants it effects rapid healing. In the not uncommon sore eyes of the first few days of life the vaseline alone introduced within the eyelids, effects a cure in a day or two. Again, in the "snuffles" of the old women, which, by preventing nursing, frequently seriously affect the health of the infant, it, when introduced into the nostrils with a camel's-hair pencil, answers better than anything I have as yet tried, especially if the head is kept warm with a flannel cap. There are many other uses for vaseline, alone or combined with varying proportions of salicylic acid, that the experience of the physician will readily suggest to him in this connection.—*Dr. Dubois, Med. Record.*

#### TUBERCULAR MENINGITIS.

Dr. Reginald Southey, physician to St. Bartholomew's Hospital, records (*British Med. Journal*, Oct. 20 and 27, 1877), four cases of tubercular meningitis in adults, and in commenting upon them says: Tubercular meningitis is apt to be misunderstood in the adult, because the symptoms have been indistinctly pronounced or carelessly observed; but the latter is the more common error. If the entire history of the illness be truthfully elicited, it is usually too significant to admit of wrong interpretation; but towards a correct diagnosis of this, as of every other disease, careful clinical observation is requisite.

The cases narrated, and some others which I have in my possession, enable me to sum-

marize, as follows, the more ordinary symptoms that mark the invasion of tubercular meningitis in the adult.

1. *Headache* is certainly the most invariable symptom; seldom, if ever, absent; never wanting in any case I ever watched.

2. *Vomiting, constipation, and fever* are present, attended by no characteristic rash.

3. Peculiarity of temper and conduct, occasional confusion of ideas, and slightly transitory delirium, are also symptomatic of this disease.

4. There are general muscular pains, followed first by stiffness, and then by slight paralysis, as shown in the imperfect co-ordination of the muscular movements, in tremblings and in twitchings. The muscular pain and stiffness are often first complained of in the nape of the neck, and then in the muscles of the back.

5. *Slight epileptiform convulsions* are observed, followed by paralysis of motion in the limbs or parts convulsed; this paralysis being most usually of a transitory or temporary kind. Among the paralyzes most frequently noticed and characteristic, I may single out those affecting the optic commissure and oculo-motor tracts, causing a slight internal squint, with dilated inactive pupil of one eye, with drooping of the same eyelid, and paralysis of the facial nerve upon one side. The paralysis of the limbs, although usually a hemiplegia, is seldom one that invades the body upon one side in its entirety. Further, its mode of attack is gradual; usually the arm and leg are affected upon the same side, but the facial muscles are not involved. First there may be inertness of the arm, then of the leg, then complete loss of power; but the arm and leg may be fully extended, and never moved, although pinched and stimulated. Then the right leg may recover and the left arm be implicated, so that an apparent cross paralysis may exist; or the right arm and left leg, or right leg and left arm may be so affected consecutively. The limbs which have been paralyzed, although they may recover some power, are seldom afterwards well co-ordinated in their movements.

6. *Hyperæsthesia* of the skin generally appears co-incidentally with peculiar mental phenomena, as, instance, conduct obstinate and unaccommodating, and a temper quite altered from that which in health distinguished the individual, a maintained attitude of dogged resistance to whatever he or she is asked to do. Very little nourishment is voluntarily taken. The abdomen becomes retracted, and the aspect of the patient, with half-open eyelids, or some slight paralysis of these, becomes highly diagnostic.

7. *Continued drowsiness* is observed. The patient shrinks from all disturbance, and shrieks out when roused sufficiently to move or perform voluntary acts. From this drowsiness,

the step to coma and death is seldom many hours distant.

The history of the case usually records an illness that has endured some two or four weeks, but one which has not attracted much attention until distracting headache with some delirium at night has supervened. Two cases I have seen were mistaken for neuralgia and hysteria, one for typhus. If, however, in these later stages, the diagnosis is usually all too certain and assured, we may well ask if, in the earlier stages, the clinical symptoms do not sometimes suffice to indicate the exact situation of the pathological lesions. Approximately, and with some likelihood, I should answer that they do, but with no positive certainty.

In those chronic, insidious, and, from their peculiar mental phenomena, most problematical cases, where there is no paralysis until the final coma, it is usual to find the tubercular meningitis principally limited to the surface of the brain; slight, too, in its amount, consisting of small opaque patches of the pia mater, attended by really very little lymph effusion; and one discovers the tubercle formations only by careful microscopic examination of the walls of the blood-vessels. If the organs of vision are involved, and there exist during life squinting or any paralysis of the muscles which move the eyes or eyelids, the base of the brain is pretty surely the seat of tubercular inflammation, and of secondary lymph or pus exudations. Again, if there exist paralysis of the limb or of one side of the face, one may expect to find matting together of the blood-vessels in the opposite Sylvian fissure, tubercles upon the blood-vessels and dropsical œdema of the choroid plexus, and softening, with capillary blood extravasations, from the size of a pin's head to that of a split pea, in the corpora striata. More especially is this rendered probable when convulsive attacks have preceded the paralysis.

More than this in diagnosis, it is true, may be achieved; thus, implication and degeneration of special cranial nerves may occasionally be shrewdly foretold before death and discovered at the autopsy; and, similarly, implication of the spinal cord may be surmised, in some instances, from the symptoms.

The pathological sequence of events that follow the tubercular formations on the walls of tiny blood-vessels are twofold: blocking up of the blood-channels and arrest of the blood-supply, anæmia of some parts of the cerebral substance, œdema and tiny capillary extravasations of others; diapedesis of white cells, softening of tissues, exudation (as it is called) of lymph. Drowsiness is, perhaps, produced by general brain-anæmia; the peculiar mental phenomena may own a similar origin. The coma is most likely due to brain-pressure consequent upon dropsy into the ventricles of the brain.

#### QUID SPECULUM POSSIT.

One of our most skillful practitioners recently had occasion to employ the vaginal speculum in the examination of a lady. The exploration finished, he was about to withdraw the instrument, when he felt a light touch upon his shoulder. "Excuse me, doctor," said the patient, "I have long suffered from pain in the stomach. *While you are there*, can you not tell me what is the matter?"—*Lyon Medical*.

#### NURSING IN COLUMBIA.

Dr. André Posada-Arario sends to the president of the society for the protection of infancy of Paris a letter from which we extract the following passages: "There is neither law nor society for the protection of infants in Columbia. The profession of wet-nurses does not exist here. Every woman, rich and poor, is accustomed to suckle her child until the signs of a new pregnancy appear, which happens ordinarily at the ninth month, so that each child is eighteen months older than its successor. There are a great many women giving birth, every eleven months, to children who do well. Nursing does not interfere at all with procreation. Each marriage here (state of Antioquia, Columbia) produces 10, 12, or 15 children. There is one woman who has had 34 children, and they are all living (she had several times twins). Her descendants as far as the great grand-sons comprise an immense number. I also know a man who has been married three times, and can count already 51 children. His wife is still young and he may be able yet to reach 60. The women here marry early—from 13 to 16 years of age. They commence to menstruate at the 13th or 14th year.

I am certain that the kind of nourishment is not without influence on the proverbial fecundity of our women. Maize forms the base of it. I have noticed the influence of this grain on hens in laying and also on sows.—*France Médicale*.

#### HYPODERMIC INJECTIONS OF IRON IN ANÆMIA.

Pennsylvania Hospital; Clinic of Prof. DA COSTA, Feb. 23rd, 1878.—From the *Philadelphia Medical and Surgical Reporter*.

GENTLEMEN:—The young woman now coming into the room, whom you have seen before, is a most marked case of anæmia, which we are treating by hypodermic injections of dialysed iron. Her name is Ann L.; she is 21 years of age, single and a domestic; admitted January 29th, 1878. Her father died with a chronic lung affection, and her mother was said to have had apoplexy. She told us on entering the ward that she had never been robust although she never had any serious illness, and, in answer to our inquiries, particularly informed us that she never had rheumatism or intermittent fever, and never was troubled with cough. Last spring her heart began to trouble her, and she suffered from palpitation and shortness of breath.



About Christmas time these symptoms were aggravated and her feet began to swell; she had headache, frequent micturition, and amenorrhœa, and notwithstanding the fact that she had good food, took iron, and was well cared for, her blood became more and more impoverished.

She was before you two weeks ago to-day, in a wretched state of health, anæmic to an extreme degree; with murmurs in the vessels of the neck and in the heart; without appetite, weak and pallid; she had not menstruated for three months. It was evident that she needed iron, but we found on several trials of the ordinary chalybeate preparations that they produced disturbance in the stomach and bowels. I then decided upon introducing iron into the system by a method adapted to insure its entrance into the blood in the most perfect and speedy manner. We commenced this treatment by throwing under the skin of the upper extremities fifteen minims of the ordinary solution of dialysed iron, but this daily dose was soon increased to thirty minims, without the slightest bad effect, local or general. The punctures have produced neither inflammation nor discoloration. In fact, she has grown so accustomed to the hypodermic needle that she makes no complaint whatever of its introduction. No disturbance of digestion has occurred, even in the slightest degree, in our patient, by this method of administration of the remedy; on the contrary her appetite has steadily improved.

A more marked evidence of real benefit, even than her improved appearance, is given by the fact that while she has been under this treatment she has menstruated during this last week, and she now wishes to leave the hospital and return home. I do not say that she is no longer anæmic, but, although she is still pale, there is evidence of a very much better condition of the blood. Another striking demonstration of her improvement is this: that the marked venous hum, which, when she was last in this room, was remarked to be so loud as to be almost heard before I placed the stethoscope over the vessels of her neck, has now nearly vanished; I do not say that it does not exist at all, but that it is much fainter and less distinct than before. She says that she feels well; her appetite is good; the bowels are regular; she has no headache; and does not suffer in the least from the secondary disturbances of the remedy. Now, since the case has reached this point of almost entire recovery, the question arises, whether to continue this treatment, or to give her the iron through the stomach, since her digestion is now so good? Under present circumstances I think it will be well to order her twenty drops of the tincture of iron three times a day. I do this, because I believe that she is almost well, and because she is going out of the hospital, and it will be necessary to give her treatment that she can carry on herself. I would not have you understand me to say that we might not have been able to obtain these beneficial results from the internal administration of iron, had her stomach always been in a condition to allow its introduction

in this way. And looking beyond the present illustration we know that there are many cases in which we wish to give this remedy, but where it causes those secondary effects of iron on feeble digestion, with disturbance of stomach and constipation, to such a degree as to absolutely prohibit its use; cases, perhaps, of anæmia, following exhausting hemorrhages, post-partum, traumatic, or in the hemorrhagic diathesis. In such patients the hypodermic method will yield all the advantages, without the disadvantages. Nor is it necessary to restrict ourselves to one method of administration, because in certain cases, where it is essential to have a rapid and positive influence on the blood, we can give small doses by the mouth at the same time that we give the bulk of the remedy by the skin.

Having learned by this case the practicability and advantages of this method of giving iron, we are led to consider it in especial connection with the subject of gastric ulcer, and of pernicious anæmia and pseudo-leucæmia. In mentioning the effect of iron upon these maladies, we recall the fact that hitherto it has not been very favorably noticed in this connection chiefly, perhaps, because of the great disturbance of digestion caused by the iron, and also on account of the imperfect absorption and defective assimilation that attends these disorders. We may, however, introduce it directly into the circulation through the absorbents, by injecting this preparation under the skin, and I think with prospects of a better result than by any other method of administration.

Let me state that, for years, I have tried to use iron hypodermically, to obtain its constitutional effects in instances in which it was desirable to introduce it rapidly into the system, or in which the state of digestion made it a remedy badly tolerated when given by the mouth. But using various salts, among them the soluble potassio-tartrate and ammonio-citrate, I found them often occasioning so much irritation that they had to be abandoned. Dialysed iron, if pure, promises well. It is, of course, essential that it should not contain acid; indeed, solution of dialysed iron for hypodermic use should be neutral in reaction. It is perfectly clear, of a deep wine or garnet color, by transmitted light, and is not astringent to the taste. The standard solution of Graham contains 24 grains of solid matter to the ounce; it is free from hydrochloric acid, and the proportion of the ferric chloride to the ferric oxide should not be greater than 1 to 27.\*

\*[The following note was made of her condition when she left the hospital, February 28th 1878: "The venous hum has sensibly declined; it is very faint; the throbbing of the carotids and of the jugular veins is less marked. Her color is coming back; the lips and cheeks are more natural." She had also become constipated, which was not the case while taking the hypodermics of iron.

\* The solution of dialysed iron used in this experiment was manufactured by John Wyeth & Bro., which fully meets the requirements indicated.

## TRANSPLANTATION.

On the 14th of May last I inserted a right superior central incisor, which had been extracted for more than a year, into an alveolar socket from which I had just extracted a like tooth for another patient. The tooth still remains firm in the socket, and the patient tells me that he does not know any difference between that and his other teeth.—*E. H. Locke, Troy, Alabama, in Dental Cosmos.*

## CASE OF ACNE ROSACEA TREATED BY OINTMENT OF CHRYSOPHANIC ACID.

By Dr. Balmanno Squire, Surgeon to the British Hospital for Diseases of the Skin.

A lady, aged forty-five, residing in one of the Midland counties, had been affected with acne rosacea for about a year and a half, when she came up to London to be treated for it. She is approaching the menopause—that is to say, for the past two or three years her periods have been irregular. However her general health is apparently perfect, and she declares that she has always enjoyed the best of health. She is a brunette of sturdy build and hearty appearance. Her face is her only misfortune. This region presents not merely the blotchy patches of discoloration which are characteristic of some varieties of acne rosacea, nor that copious sprinkling of minute pimples which represents another common phase of the disease, but rather what may be termed tuberculous variety of acne rosacea—that is to say, the papules, or rather tubercles, are individually large; not that their sebaceous core forms any considerable portion of their bulk (as is wont to be the case in the indurated phase of “acne juvenilis”), but that the elevated induration which encloses the small core is notably developed. These tubercles (several of which are the size of split peas), although they are mostly smaller, occupy very abundantly the forehead, the cheeks, and chin, and also that portion of the skin of the neck which lies immediately under the lower border or “base” of the lower jaw.

She was treated with chrysophanic acid ointment as an external application to the face, and with glycerole of nitrate of bismuth as an internal remedy. No other remedy, external or internal, was used from first to last.

She commenced treatment on January 19, 1877. On February 27 she presented herself quite free from any trace of her former eruption. I attribute the alteration she experienced purely to the action of the chrysophanic acid ointment. There was no indication whatever for the exhibition of bismuth; the patient's digestion was in no way out of order; but I was engaged at the time in making further observations on the effect of my glycerole of the nitrate of bismuth, the preparation and

physical properties of which have already been fully described in this journal.

In the case of this patient, a dose of the glycerole containing four grains of the nitrate of bismuth, given three times a day for a few weeks, produced no appreciable effect of any kind.

As to the ointment, it consisted at the first of twenty grains of chrysophanic acid dissolved in an ounce of lard at the temperature of an oil-bath. For the last ten days of the treatment, however, the strength of the ointment was raised to that of forty grains of chrysophanic acid to the ounce of lard. The ointment in either case was regularly, three times a day, rubbed well in all over the face, avoiding only the eyelids and the lips. From the beginning the beginning to the end the patient never experienced any smarting from this energetic treatment. However, occasionally the face became a little puffy, as if slightly swollen. Throughout this treatment the face became more or less stained by the action of the ointment, but it was not very much stained. The complexion of a field laborer about autumn time is often quite as dark as this patient's face was at any time of the treatment. The stain proved, of course quite transient, passing away completely after a few days' discontinuance of the ointment.

*Commentary.*—The case above related bears on some points of dispute as to the action of two new remedies. Of the glycerole of nitrate of bismuth it was generally prophesied that it would prove a very sharp and acrid medicine: but in this case a fair dose of it given for a long while did not appear to be at all a disagreeable remedy. Of the chrysophanic acid ointment it has been said by some that it is dangerous to use it to the face, and by others that even when used to the tougher regions of the skin its strength ought not to exceed a scruple of the acid to the ounce of lard, and even then its use ought to be cautiously limited to one or two, or at the most but very few, applications. Now, in this case, an ointment of forty grains to the ounce, well made by one of the best chemists in this city, was energetically rubbed in over the whole of the face three times a day for thirty times in all, without producing any sensation of smarting, nor causing more swelling than a very moderate puffiness of the face. Then the staining of the skin has been spoken of as a great disadvantage. “Patients,” it is said, “object to this very much.” Now, this patient did not make any difficulty of that kind. The case illustrates, moreover, quite a new field for the employment of chrysophanic acid. I have already pointed out that it is a serviceable remedy in cases of psoriasis. To this I have now to add, that it is capable, on occasion, of curing acne rosacea.—*Medical Times and Gazette, June 23, 1877, p. 665.*

# **BORAX AND NITRATE OF POTASSIUM IN SUDDEN HOARSENESS.**

These two salts have been employed with advantage in cases of hoarseness and aphonia occurring suddenly from the action of cold (see *La Franco Médicale*, No. 86, 1877, p. 682). The remedy is recommended to singers and orators whose voices suddenly become lost, but which by this means can be recovered almost instantly. A little piece of borax the size of a pea is to be slowly dissolved in the mouth ten minutes before singing or speaking: the remedy provokes an abundant secretion of saliva, which moistens the mouth and throat. The local action of borax should be aided by an equal dose of nitrate of potassium, taken in a warm solution before going to bed.

## **THE AUTOMATIC METHOD OF REDUCING LUXATIONS OF THE HIP.**

By Alpheus B. Crosby, M.D. (*Phila. Med. Times*, June 23d, 1877, and *N. Y. Med. Jour.*, July, 1877), and S. J. Allen, M.D., (*Ohio Med. and Surg. Jour.*, Oct., 1877.)

In October last there was admitted to his wards, in Bellevue Hospital, a typical case of dorsal luxation (the toes resting on the opposite instep, there being very marked rigidity present and abduction being entirely impossible), but which had been diagnosed as one of fracture of the neck of the femur within the capsule, by a physician outside, and treated as such for about thirty hours previous to admission. Under these circumstances he resolved to at once adopt the following plan: The patient having been placed on his back upon a blanket spread upon the floor was thoroughly anesthetized, in order to obtain complete muscular relaxation, and the legs were flexed at a right angle upon the thighs, and the thighs similarly flexed upon the pelvis, for the purpose of removing the strain from the ileo-femoral or Y ligament. Dr. Crosby then placed his hands upon the calves of the legs, quite near the knees, and raising the pelvis a short distance from the floor, made very slight abduction of the affected limb, when, in about a half a minute from the commencement of the manœuvre, he had the satisfaction of feeling the head of the bone slip into its normal position. He explained that in this procedure the patient was made to perform the reduction himself, a sort of *felo-de-se*, as he termed it, the weight of his body supplying the extension, while the counter-extension was made by the operator, who performed simply the office of a post, though an intelligent one, to be sure. The method was first described to him by a friend of his in Vermont, Dr. S. J. Allen, who had hit upon it accidentally about two years ago, while in the act of lifting a patient suffering from this dislocation, so as to get him into a suitable position for performing the usual manipulations attempted for the reduction of the deformity. Since then he has adopted the same course, with equal success, in two other similar

luxations, so that Dr. Crosby's makes the fourth case in which the procedure has been employed. So far as Dr. Crosby has been able to ascertain, these are the only cases in which it has ever been done. In Dr. Bigelow's admirable monograph on luxation of the hip (a copy of which, strange to say, he found it difficult to lay his hands on in New York), he has found that the same position was used in a number of instances there recorded, but the method pursued was always different from that which he had ventured to call the automatic. (*Philadelphia Medical Times*.) Dr. Allen, in his report, adds another case, and repeats the views so ably presented by the late Prof. Crosby, without, however, even mentioning his name in connection with this simple and efficient method of reduction. To Dr. Crosby belongs the honor of having first given this method to the profession.—*N. Y. Hosp. Gazette*.  
E. J. B.

Dr. J. Milner Fothergill, the London Correspondent of the *Philadelphia Medical Times*, in his letter which appears in its issue of the 19th January—thus speaks of the use of strychnine, as an expectorant in chest diseases:

In this season of *bronchitis*, it may be practically useful for your readers to know the great utility of strychnine as a true expectorant by its action upon the respiratory centre. Like ammonia, it does not act upon the mucus lining of the air-tubes, but upon the nervous centres of the respiration. The experiments of Prokop, Rokistanky, and others, with this agent, show that it has a decided action in stimulating the respiration by acting upon the respiratory centre in the medulla oblongata. Ammonia acts in the same manner. Ammonia is commonly added to cough mixtures for its stimulant expectorant effect. It enables the patient to respire more perfectly and so to expectorate the phlegm more effectually. This is of the utmost importance in bronchitis when the stage of free secretion is reached and the air-tubes are full of mucus, and the patient is in danger of choking. Here the battle lies betwixt the powers of the patient and impending exhaustion. The ordinary mixture of carbonate of ammonium, spirits of chloroform, and senega is very useful; and some tincture of squill will be found a useful addition. But increasing clinical experience of strychnine leads the writer to the conclusion that of all agents which exercise a stimulant effect upon the nervous mechanism of the respiration, strychnine is one of the most potent and useful. Strychnine acts powerfully upon the expiratory part of the respiratory act, and kills, by producing spasm of the muscles connected with expiration. It is very useful, then, when expiratory efforts are required for the expulsion of mucus gathered in the air-tubes. In chronic bronchitis, with emphysema, it is of great service, and in the dyspnoea connected with advanced Bright's disease it is very efficacious. It produces good effects when given alone, and is a useful addition to ordinary

cough mixtures. A combination of carbonate of ammonia, tincture of nux vomica, and tincture of squill, is a most excellent mixture for patients suffering from dyspnoea, and generally procures them "more breath," as they phrase it. One of the most important matters connected with such use of strychnia is its relation to sleep. In many of these cases sleeplessness is a prominent factor; and sleep can be procured only by a narcotic. But while the narcotic acts upon the nervous system generally, it also acts upon the respiration, probably at its centre in the medulla, and the patients are apt to wake up with an attack of dyspnoea. A series of cases has demonstrated that by the use of strychnia the respiration is so improved that the patient can go to sleep without the narcotic, and, more than that, sleep fairly well, and be quite free from attacks of breathlessness, which awaken the patient and cause him to add voluntary respiratory efforts to the automatic act of respiration. By resort to strychnine these patients can be much relieved. In a case seen recently of complex lung and heart mischief, to which was added chronic chloral poisoning, the good effects of strychnia were very marked. The patient was almost at once relieved from the attacks of dyspnoea in the middle of the night, to which he had long been subject. By the use of strychnia during the day, a narcotic pill at bedtime is often deprived of its tendency to produce nocturnal dyspnoea; and strychnia may be usefully prescribed in cases of shortness of breath, where there has been also long indulgence in hypnotics. There is no such thing in this world as unalloyed good, and strychnia, so used, sometimes acts so powerfully upon the bladder-centres, and produces such irritation there, as to necessitate its discontinuance. But this is not the rule by any means.

#### REMARKS ON SOME INDIGENOUS PLANTS.

Selections from PROF. ROTHROCK'S Lectures on Botany, University of Penn.

Too often physicians overlook the fact that numerous common plants, many outside of the *Pharmacopœia*, possess remedial virtues, and are used successfully as therapeutical agents by a great many physicians, especially in rural districts.

A knowledge of the uses may serve a happy turn, in ways least expected. Prof. Rothrock has paid considerable attention to the medicinal value of common plants, especially those indigenous, and in this sketch a few of his observations will be recorded.

*Witch Hazel* is almost a specific in sprains.

*Ground Ivy* is anti-spasmodic and anti-scorbutic.

*Salvia* (Cheia) can replace linseed. It is more than a demulcent, being also a nutrient, thus of value in certain gastric derangements. It is capable of maintaining life for some time. With the addition of a very little beef, Prof. Rothrock lived on it at one time for two weeks.

*Fever Root* is cathartic and emetic.

*Dogwood* is not often enough used; can frequently replace quinine.

*Wormwood* is much used and valued by the western mountaineers. Used as a tea, for malarial fevers, and as a general tonic.

*Uva Ursi* is used by some sailors as a chewing medicine for gonorrhœa.

*Common Poison Laurel* is good in the treatment of facial neuralgia. May be used in the following manner.

R Tr. *Kalmia Lutea*.....1 drachm.

Tr. *Cimicifuga*.....1 drachm.

Alcohol.....1 ounce.

M. S. 5 to 10 drops at a dose; repeated with care.

*Trailing Arbutus*. Leaves make an elegant diuretic tea. Used freely.

*Canada Fleabane*. Most excellent in uterine hemorrhage.

*Gelsemium* will prevent the toxic effects of quinine, especially ringing in the ears.

Not enough attention is given to *Peppermint*. It possesses decided stimulant properties. Useful in delirium tremens—steadies up. It may be combined with aromatic spt. ammonia and carb. soda.

*Valerian Edulis* is as good as the official valerian.

*Water Arrow* is a good astringent.

*Pomegranate* now grows in California, but is not an indigenous plant. Excellent for expulsion of tape worm.

*Barberry*. Cathartic and anti-periodic.

*Blue Cohosh* may be used in place of ergot.

*Smart Weed*, an emmenagogue, safer than savine. May be used as an ointment for baldness.

*Bittersweet* ought to be more used; a good laxative, useful in intermittent fever, and for habitual constipation, not producing secondary constipation.

*Shellbark* tea, for tœmia, is an excellent remedy.

*Hydrastis Canadensis* is excellent in gleet, etc.—*Phila. Chemist*.

#### LIBERALISM IN HOMŒOPATHY.

The resolutions recently passed by the Homœopathic Medical Society of the County of New York are a striking indication of the tendencies of the times. They say in effect that the dogma "similia" is no longer capable of universal application, and that, as honest physicians, the homœopaths are obliged to rely to a greater or less extent upon the practices and methods of the older school. In other words, they no longer desire to be considered as exclusives.

For many years it has been a matter of common notoriety that professing homœopaths have not infrequently availed themselves of the teachings of regular medicine, and applied them in purposely disguised forms. The inconsistency of such a course has undoubtedly led to much of the ill-feeling which we as a school have borne towards them. The present honest declaration, that homœopathy, pure and simple, is not all that their earlier fancies painted it is simply a public admission that the sectarian posi-

tion formerly assumed by them is no longer tenable, that duty to their patients require them to become physicians in the broadest sense, and not blind followers of a creed nor worshippers of a man. That honesty, learning and ability, possess many representatives in their ranks is unquestioned, and we welcome the resolutions as a desire on their part to return to the ranks of a catholic profession, broad enough, as its earlier records show, to embrace and give trial to any views, when presented in a spirit of scientific moderation, and when not accompanied by too great demands upon ordinary credulity.—*N. Y. Med Record.*

#### TREATMENT OF HÆMOPTYSIS FROM LUNG CAVITIES.

Dr. R. Douglas Powell, Physician to Brompton Hospital for consumption, makes the following remarks on the treatment of hemorrhage from phthical cavities (*Lancet*, Dec. 1, 1877).

The treatment is such as would be dictated by common sense. The most absolute rest in bed is imperative. Beware of the brandy-bottle. The first thing the friends of the patient naturally do when they find him faint from hemorrhage is to give him brandy. But this moment of faintness is just the period at which there is the opportunity for the hemorrhage to become staunched by the formation of a coagulum, and so long as the pulse does not absolutely fail, we should withhold stimulants, and avoid them throughout the treatment of the case. We can scarcely expect drugs to do much in such cases as these. Ergot in full doses and turpentine have been found most useful at this hospital. The momentary application of an ice-bag to the chest or between the shoulders appears sometimes to be useful. When the shock is great, opium will best relieve it. After a day or two, if the exhaustion and anæmia be great, an astringent form of iron is often of great value, as the iron alum or the perntrate of iron, but the effect of these remedies must be closely watched. In cases in which there is a tendency to recurrence of the hæmoptysis, such patients usually making blood fast, the diet should be carefully restricted, principally to fish and farinaceous food, without stimulants.

#### SUBCUTANEOUS INJECTION OF ERGOTIN IN NEURALGIA.

In an article on this subject in the *Gazette Clinica de Palermo* for June, 1876, Dr. S. S. Marino sums up the following conclusions.

1. In sunstroke and tic-douleureux, local hypodermic injections of ergotin have rapid and certain effects, superior to those obtained by all other remedies, including quinine.

2. The results are equally good in hemicrania.

3. In sciatica, ergotin may also give ready and brilliant results, but sometimes, from reasons which we do not yet know, it may completely fail, even in individuals in whom its use appeared at first quite successful. It is necessary to enlist new facts, in

order to pronounce a definitive judgment on its value in this troublesome and obstinate malady.

4. It would also be useful to try the effect of the hypodermic injection of the fluid extract of ergot in other neuralgiæ, especially those dependent on blood-infection and cachexy. It is well known that, in diseases of the nervous system, it is not reasonable to trust to any one remedy; often, after remedies of the highest repute have been tried and failed, relief has been obtained from one of which little was expected. Even when the disease recurs in the same form, the same remedy does not always give useful results.

5. When injected under the skin, ergotin does not cause abscess, except in very rare cases, nor erysipelas, nor any other inconvenience. The injection is usually followed by more or less intense burning, sometimes pain; but both disappear in half an hour, if the seat of the puncture be dressed with small compresses dipped in cold water.

6. Sometimes after one, more frequently after two injections, the pain entirely ceases, but, in order to secure the advantage gained, it is advisable to continue the injection, in number from two to six after and first two, according to the severity of the neuralgia, the length of time during which it has lasted.

7. Dr. Marino has not found it necessary to inject more than 20 centigrammes (3 grains) of the remedy. for adults, 15 centigrammes are ordinarily sufficient. He dissolves it in either water or glycerine.—*London Med. Record*, Nov. 15, 1877.

#### CALOMEL AS A MEDICINE.

Dr. Lanchester, in the Southeastern Branch, East Surrey District, Medical Society, in some remarks on calomel as a medicine, after stating that fashion had been against calomel of late, remarked that its evils had been exaggerated, and, in attempting to do without it, we were depriving ourselves of an useful medicine. Calomel was spoken of as an alternative, but its known effect was purgative. As a cholagogue, there was no increase of bile or stimulation of the liver; and the bile, after its use, was due to rapid action preventing the ordinary changes of bile in the colon. As an antiphlogistic, he contrasted Sir T. Watson's "sheet anchor in inflammations" with Mr. Holmes's "no power to resist inflammation, but induces cachexia, which prevents adhesive formations." Calomel was diaphoretic, diuretic, and sedative, useful as a purgative in children from small dose and freedom from color or smell. He found it very useful in gastric catarrh, with rapid pulse and rise of temperature; in dentition, with confined bowels; convulsions; with throbbing fontanelle; and in croup; and, with other aperients, in worms. In adult life it gave great relief in sluggish liver, and gouty persons, in cases stimulating puerperal fever, urgent sickness in peritonitis, in red and oedematous throat. In congestion of the liver he advocated its use as a convenient purgative, not continued. In acute gout and



rheumatism he gave a full dose at the commencement. In syphilis, he gave a course of mercury, and in this way it was stated to be a means of warding off megrim. He relied upon the drug principally for occasional use, but was loth to practice the continued use of a medicine which was not a natural constituent of the blood.—*Brit. Med. Jour.*

#### HYPODERMIC INJECTIONS OF NITRATE OF SILVER IN NEURALGIA.

M. Le Dentu (*L'Union Médicale*) has employed with success these injections, not only in cases of obstinate neuralgia and sciatica, but for the purpose of allaying pain, no matter to what cause it may be due, and especially in cases of arthritis. Two or three drops of a strong solution (one in five) are injected into the cellular tissue; sharp pain at once follows, and at the end of three or four days a small abscess is formed, while the painful symptoms of the original malady have either diminished or disappeared. The abscess he has never found to be attended with any serious consequence, and if opened on the fourth or fifth day it will speedily heal. He believes that in cases where Vienna paste, red hot iron, or other caustics are used, the nitrate of silver injections would be found much superior in efficacy.—*Lon. Med. Record.*

#### THE FORCEPS IN MIDWIFERY.

Mr. Rigden read a report, in the Southeastern Branch Medical Society, of the last two hundred obstetric forceps cases that had occurred in his practice during the last eighteen years—the proportion being about seven per cent. of the total number of labors. The forceps cases had been generally those in which there was either considerable inertia or marked disproportion, and yet there had been no maternal death and but nine still-births. He advocated the more frequent use of the forceps than was generally taught, the object being to assist, and not, as some practitioners imagined, to interfere with nature. His experience had taught him that the dangers of the forceps were not in its early use where there were no contraindicating circumstances, but in the delay in its application, as the operation certainly prevented much additional suffering and anxiety to the mother, and was a preservative of the life of the infant. His practice was to make as little ceremony as possible about its application, generally to have the forceps with him if likely to require it, and to inform the patient that there was no danger in its careful employment. He deprecated the delay as well as the alarm caused to the patient and her friends by calling in further advice, or by making much ceremony about the application. He believed that obstetric practitioners are now much more than formerly in the practice of using the forceps; and his object in bringing the subject before the meeting was to instil more confidence in its employment.

Dr. Lewis thought that the use of the forceps once in fifteen cases was unnecessary, and that the interference was excessive.

Dr. Bowles was of opinion that the forceps was more frequently used at the present day than it was a few years ago; and that this earlier and increased use of the forceps was justified by experience.

The general feeling of the meeting coincided with this view.—*Brit. Med. Jour.*

#### ANOTHER ECTROTIC IN SMALL-POX.

The powder consisting of four parts sulphur and precipitate, employed by Semaria with such success in eczema and acne, will, he now claims, prevent the unsightly cicatrization after variola. The suppurating pustles are to be first penciled with glycerine and the powder afterward thickly strewed over them. The crust thus formed is cast off without leaving behind any cicatrices.—*Gaz. Med. ital. Lomb.*

### THE CANADA MEDICAL RECORD A Monthly Journal of Medicine and Surgery.

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#### THE WESTERN AND ST. CLAIR MEDICAL ASSOCIATION.

On Wednesday, the 13th of February, this Association met at Chatham, Ont., there being a good attendance of members. Dr. McGraw, of Detroit, and Dr. Bates, of Washington, were present. Dr. Beemer, of Wyoming, in the absence of the President, was elected to the chair. The following were elected officers of the Association: Dr. Tye, President; Dr. McAlpine, Vice-President for Middlesex; Dr. Longheed, Vice-President for Lambton; Dr. Lambert, Vice-President for Essex; Dr. Sampson, Vice-President for Kent; Dr. Fraser, Treasurer; Dr. Beemer, Secretary; Drs. Bucke and Richardson, Auditors. Dr. Heaming, of Chatham, read a paper "On the Causation and Pathology of Typhoid Fever;" and Dr. Bucke, Superintendent of the Insane Asylum at London, also read a paper, the subject being, "The Moral Nature and the Great Sympathetic." We trust to see this paper in print, for anything emanating from this gentleman is not only well worth being read but well worthy of deep reflection. The meeting adjourned to meet in May or June in Detroit.

## PERSONAL.

A. Lapthorn Smith, (M.D., Laval University,) has passed the examination necessary to admit him a member of the Royal College of Surgeons, England.

Dr. Molson, Assistant Demonstrator of Anatomy, McGill University, is absent in Europe.

Dr. James C. Cameron, (M.D., C.M., McGill, 1874,) formerly House Surgeon of the Montreal General Hospital, is at present in Dublin, attending the practice of the Rotunda Lying-in Hospital.

Dr. T. Morrison Fiset, (M.D., Victoria College, 1877,) formerly Out-door Physician to Bellevue Hospital, New York, has commenced practice at Gaspé Basin, Que.

Dr. H. R. Storer, formerly of Boston, and who, owing to poor health, passed the last five years in Europe, has recently returned and located himself at Newport, Rhode Island.

Herbert L. Reddy, B.A., (M.D., C.M., McGill University, 1876,) passed his final examination before the Royal College of Surgeons, Edinburgh, and received the diploma of membership on the 31st January ultimo; also passed his examination at the Apothecaries Hall, London, and received the certificate to practice, on the 14th February.

Charles H. Murray, B.A., (M.D., C.M., McGill University, 1876,) passed his final examination before the Royal College of Surgeons, England, and received the diploma of membership on the 23rd January ultimo; also passed his examination at the Apothecaries' Hall, London, and received the certificate to practice on the 8th November, 1877.

On the 15th of March a number of ladies and gentlemen assembled at Dr. Beemer's, at Wyoming, Ont., to pay him a farewell visit on his removal to London, where he assumes the position of Assistant Physician at the Asylum for the Insane. An address was read by Rev. Geo. Cuthbertson and a handsome silver ice pitcher, goblets and tray were also presented with the address. The Doctor made a feeling reply. Dr. Beemer was also made the recipient of another surprise by the boys of his class at St. John's Church Sunday School, who presented him with an address and a beautiful silver inkstand in the shape of a stag's head and antlers.

ROBERT LEA McDONALD.

In our obituary notice of this eminent physician in our last issue we omitted to state that, in 1851, he associated himself with a number of physicians in Montreal in organizing the St. Lawrence School of Medicine. In this school he filled the chair of

Clinical Surgery. The institution only existed one session.

DR. HODDER, TORONTO.

This distinguished practitioner died at Toronto on the 20th of February. He was a native of England, and entered the Navy when twelve years of age, serving only one year when he left the service with a view of studying medicine, which he eventually did, taking the diploma of the Royal College of Surgeons in 1834. In France he practiced for some years, during which time he paid Canada a visit. He finally settled in the neighborhood of Queenstown, Ont., about 1839, and removed to Toronto in 1843, and continued to practice there till his death. In 1845 he received the degree of C.M. from King's College, and M.D. from Trinity College, Toronto, in 1853. In 1850 he assisted in the establishment of the Upper Canada School of Medicine, and which became the Medical Faculty of Trinity College. This school after a time became extinct, and he became connected with the Toronto School of Medicine. In 1870 the Trinity Medical Faculty was reformed and Dr. Hodder became its Dean, and occupied that position at his death. He was President of the Canada Medical Association in 1875. Dr. Hodder was a first-class practitioner, and in gynecological diseases he had a wide reputation. His death removes from the profession in Canada one of its most prominent and esteemed members.

Dr. Fleetwood Churchill, the eminent obstetrician, died, February 2, of broncho-pneumonia, in the seventieth year of his age.

## EXTERNAL USE OF TINCTURE OF BELLADONNA IN NIGHT-SWEATING.

Dr. J. T. Nairne writes to the *British Medical Journal*: For some little time past I have employed the common pharmacopoeial tincture of belladonna for sponging the body in cases of phthisical and excessive sweating, and invariably with marked benefit. So far as my experience goes, I have found it very much better than anything else, if applied before a sweating comes on, it prevents it; if during the sweating, it almost immediately controls it. Two teaspoonfuls of the tincture mixed with an equal quantity of whisky are quite sufficient (applied with the hand) to cover the whole body and produced the desired effect. I have adopted this method of treatment in my last cases of scarlet fever, which have all done well; but they have not been numerous enough to justify any definite opinion of the value of belladonna applied in this manner.

## Original Communications.

*Trephining the Skull in a case of Idiocy with remarks*, by WM. FULLER, M.D., C.M., Prof. of Anatomy, Medical Faculty, University of Bishop's College.

(Read before the Medico-Chirurgical Society of Montreal.)

GENTLEMEN:—I think that the following case is possessed of more than ordinary interest, as opening a field of enquiry as yet, so far as I know, little explored by medical science.

The subject of this sketch, K.B., a female child, aged two years, came under my notice about the middle of September last, presenting a condition bordering upon extreme idiocy. The parents were Scotch, healthy, and very intelligent. The mother states that she had received a severe fright when three months pregnant, but thought no more of the matter until she noticed the condition of the child some months after it was born, which was at full time. Labor was tedious, lasting 28 hours, and very severe. The forceps were not used. After birth a depression was observed on the left side of the head along the fronto-parietal suture, which disappeared in two or three weeks. The child cried incessantly the first day; it had convulsions on the second day, which occurred about every ten minutes for four days and at longer intervals for two three days more. It had another attack when seven months old after vaccination, another at fourteen months, and one about a month since, from indigestion. She has always enjoyed excellent health, has had none of the infantile diseases, nor any trouble in teething. Her appetite is good as well as the digestion, but she is inclined to be costive. She is well nourished, but her feet and legs have always been very cold and her circulation sluggish. Her head is very small in comparison with her face, and there is a profuse growth of glossy brown hair, which grows very rapidly. The skull is well formed, but remarkably small, the fontanelles are perfectly closed, and were never noticed to be open as in other children. The sutures are elevated into broad ridges, the mastoid and occipital processes are very prominent, and the whole feels like a little old skull. In a state of quietude the face is expressionless, the eyes are divergent, turned upward toward the left side, and continually moving in slight jerks, the pupils are partially dilated and affected by light. The tongue habitually projects be-

tween the lips. She uses the left arm well, but the right is flexed and held tightly to her side, and the fingers of this side are cramped tightly over the thumb which is bent into the palm. When this position of the arm is removed by forcible extension it immediately returns. When she is asleep this arm and fingers are relaxed and can easily be extended, where it remains until she awakens. This arm is always colder than the other and has a bluish look when exposed. The peronei muscles are contracted in both legs, which turns the feet outward, and there is an irregularity and stiffness in all her movements. She sucks pap from a spoon and slobbers very much in taking food. She was never known to chew, always sneaks, and chokes on the smallest particles of solid food, as a grain of rice, getting into her throat.

She takes no notice whatever of objects placed before her, is quite indifferent to persons, does not know her mother, and is quite happy with anyone, so long as she is fed and held. She does not wink when the hand is suddenly brought toward the eyes, but she is not blind, since the pupils respond to the light. She is startled by a sudden sound and would often cry if any one sneezed or coughed in her presence. Her disposition is happy, and she habitually wears a pleasant smile. When very much pleased she laughs heartily, and goes off into a fit of ecstasy, characterized by straightening herself back, fixing the legs stiff with the toes turned out, turning the eyes and head to the left side, projecting the lips and uttering a peculiar crowing and jerking noise and clapping her right hand with the left. She never made any attempt at locomotion, and would remain content all day in one position, crowing and practicing a few automatic movements of the left arm and the legs. Although her parents had adopted and persevered by every means to extend her association of ideas, they are limited to the following: She appeared to expect food when the spoon was tapped on the dish; when asked to "clap mamma," she would raise the left hand and strike her mother's cheek; when asked to hide, she would turn her face to the right. These motions were automatic and limited, so that it was necessary to place the cheek in the line of motion of her hand. She turned the head when spoken to, was displeased when scolded, and when anything was put

into her hand, she immediately threw it down and was pleased at the noise.

*Diagnosis.*—Compression of the brain from early consolidation of the bones of the skull. This conclusion was arrived at from the following interpretation of the symptoms:

1. Spasmodic condition of certain muscles and stiffness in the general movements of the body indicate, as in convulsions, an anæmic state of the nerve centers of motion.

2. During sleep, when the brain is naturally collapsed, giving room for an equal circulation to all the nerve centres, the muscular system was equally relaxed.

3. An emotion produced a semi-convulsive movement of the body, by absorbing all the circulation within the cranium to the part of the brain which was the seat of action; or the consequent erection of this part of the brain within a confined space, acted by crushing the blood from other nerve centres, as observed in persons when some violent passion takes absolute possession of the mind, and even paralyzing the body in a stiff condition, as instanced in the statue-like paralysis of fear.

4. Sluggish circulation in the body, and especially in the spasmodically-paralyzed parts, accords with the physiological law, that the nerve centre and its peripheral distribution is regulated from the same vaso-motor centre, and is an indication of deficient circulation in the motor centres of these parts.

5. The want of development in such natural actions as chewing, etc.

6. Divergence of the eyes and a dilated state of the pupils, also a liability of convulsions produced from slight causes.

Thus far we have a picture of chronic compression of the brain, beside which we have two other conditions which are not unimportant factors in this case.

7. The profuse quantity and rapid growth of hair, indicating great vascularity of the scalp which received most of the blood thrown into the carotid arteries.

8. The absence of the fontanelles and the complete consolidation of the skull, at an early age, indicated the cause of this condition, viz: chronic compression of the brain. The skull was perfectly symmetrical but small, and the spasm of the right arm pointed out the greatest compression to exist on the left hemisphere.

Accepting the above as the theory of the condition, the parents consented to the proposal to remove a portion of the skull in order to give room to the brain, or to relieve the pressure which prevented circulation in the dormant organ. Accordingly, with the assistance of Dr. Trenholme, on the 24th of September, I removed a circular portion of the skull  $1\frac{1}{2}$  inches in diameter from the left parietal bone, just above and in front of the eminence. At 1 p.m., chloroform was administered, which took a remarkably quick effect. One straight incision was made, sufficient to admit the trephine. The scalp was thick and very vascular; several arteries, very large for the situation, were divided and spouted freely. The bone was about  $\frac{3}{8}$  inch thick, dura mater thin and bluish in color, and bulged to such an extent that we feared that it might slough from pressure of the inner margin of the opening in the skull. The brain had a very strong pulsation. Owing to the effect of the chloroform, which very nearly asphyxiated the child, I was prevented from carrying out my intention of removing more bone at this time. The wound was brought together tightly on account of hemorrhage, and a large clot filled the space.

The immediate effect of the operation was, that the child became warm over its whole body, its eyes assumed a more parallel direction and were more steady in their movements, it began to stretch out and open its paralyzed and stiff arm and hand. The tongue receded into its mouth, and on the fourth day it was observed that it chewed and swallowed solid food for the first time in its life and did not slobber. Perception was slowly developed. It was observed on the 9th day, which was the first time she was tested, that an object fixed the eyes for a moment, and after repeated trials, when she was well enough to bear it, her attention could be drawn for some time; but if the object was moved she lost it, and the eyes would oscillate slowly until her attention was again fixed upon it. After a few days perseverance in teaching she could follow an object with the eyes when it was moved very slowly, and this capability increased rapidly, so that at the end of a month or so she had so far improved that she knew and cried after her mother, would play with her mother's broach, the buttons on her dress, and distinguished other persons, some of whom

she liked and others disliked. If an attempt was made to take her from her mother she would put both arms around her mother's neck and her legs around her waist and cling to her, and if any attempt was made at forcible removal she would cry. She knew the dog, would play with his ears while holding her face back for fear of his nose; he once scratched her, after which she avoided him. She soon began to understand words, and would hide with "mamma's ribbon," her hand, or her pinnie, as she was told. She knew the words dinner, Uncle John, auntie, mamma, ribbon, pinnie, Carlo, "pretty, pretty," for broach, and she also improved by distinguishing objects at a greater distance.

November 3rd.—I again removed a portion of the skull of the same size just behind the first, with slight improvement, especially in the parallelism of the eyes, which were now almost straight. The spasm of the peronei muscles was not affected in the least. It was also observed by some friends that her cry was changed, sounding more like a coaxing or fretting cry of a baby. She is not so easily startled by a noise, neither does an emotion cause her to go into so violent and long-continued state of ecstasy.

She returned to her home in Ontario on the 9th of November. From a letter dated the 11th Dec. the father says she is improving in intelligence, that when they are eating, her eyes follow the food from the plate to their mouths as much as to say "give me a bite," and when the mother chews some food for her, she opens her mouth in anticipation of it. A letter of a later date shows some attempt to talk. When asked if she loves papa or mamma, she answers "Ah!" and if asked if she loves some other person whose name is mentioned, she will not answer. At the words "up again," "down again," she will raise or put down her arms, suiting the action to the words. She will also make a "funny face" when asked, and laughs as if she thought she had done something cunning. The parents are very persevering, and show a remarkable intelligence in drawing her out, for which they deserve great praise.

February 6th.—I paid a visit to my patient in order to satisfy myself of the improvement and its permanence before completing this paper, and I felt gratified to observe that she had gone back in no respect. She could bal-

ance herself so as to sit up, could stand in a corner, had made some attempts at locomotion by rolling from one place to another, and her countenance certainly wears a much more intelligent look. She winks when the hand is brought suddenly toward the eyes. I saw her reach for a glass of water with her mouth open, asking in her way for a drink, and take a cracker in her hand, bite off a piece and chew it as another child would, though she is not yet over the habit of throwing things down in order to hear the noise. The pulsation of the brain is visible at the site of the wound, which is slightly depressed below the level of the scalp, but not the skull. I saw her only about two hours.

April 5th.—A letter states that she has learned to kiss, turn her head and open her mouth when asked to do so, and many other little tricks have been learned.

It is noticeable in these observations that those motions of the body which belong to the instinctive actions were immediately developed upon removal of the cause which interfered with their function, while perception and association of ideas were slowly attained in the manner in which we acquire knowledge.

Having now stated what is most interesting to the psychologist, I will give a daily record of what pertains to the operation, which is more interesting to the surgeon.

Sept. 24th.—The evening of the operation the child was nervous and startled by the slightest noise. A small dose of morphia about  $\frac{1}{2}$  gr. was given at 4 p.m. and another at 10 o'clock.

Sept. 25th.—Restless night; temperature  $102^{\circ}$ ; very nervous, especially susceptible to sounds. Tumefaction of the wound, and scalp swollen around it. Opened two stitches and allowed a tablespoonful of bloody serum to escape. Bathed the head with warm water, wet her shirt, and gave morphia. 8 p.m. temperature  $101^{\circ}$ ; rested well to-day.

Sept. 26th.—Restless and very nervous; temperature  $101^{\circ}$ . Morphia, wet shirt, and bathe the head frequently with very warm water. 8 p.m. quiet; temperature 101.

Sept 27th.—Rested much better; not so nervous. Temperature  $99^{\circ}$ ; appetite, when it was noticed that she chewed for the first time. Morphia omitted.

Sept. 28th.—Rested well; temperature normal.



Sept. 29th.—Wound healthy; discharge serous.

Sept. 30th.—Temperature  $100^{\circ}$ ; wound dry and yellowish along the edges. The mother has a patch of diphtheria on the tonsil and a very sore throat.

Oct. 1st.—Record as yesterday.

Oct. 2nd.—Dyphtheritic membrane visible in the wound. It was observed to-day that she would notice the hand before the eyes. She is very fond of grapes, and they have been given freely to her during the whole period.

The dura mater is even with the skull, and is covered with dyphtheria.

Oct. 3rd.—Wound very offensive; the left ear is discharging an offensive matter and a small patch has appeared in the throat.

Oct. 4th.—Wound greyish, very offensive and sloughy-looking. The parts which were united have separated, and the wound gapes to its full extent, exposing the bone, which is also covered with a sloughing membrane, but is dry in places. This state of affairs continued for ten or twelve days—the membrane alternately forming and sloughing. The tonsils, uvule and palate were covered at times but cleared up in eight or ten days, and, as I have noticed in several other cases, this disease is seldom fatal when an external wound is affected at the same time. Sulphur was blown over the wound, into the ear and the throat, and appeared to lessen the fœtor of the wound and ear.

Oct. 23rd.—The wound presents a granulating surface which secretes a yellow pus not so foetid. The child has been very well in her general symptoms, considering the ordeal of dyphtheria, and, notwithstanding her sickness, her intelligence has developed rapidly.

Nov. 3rd.—No dyphtheria; wound healthy and granulating. Decided to remove another portion of bone; by accident the dura was sawn through to the extent of  $\frac{5}{8}$  of an inch. No unfavorable symptoms followed, and on the 9th of November she left the city for her home in Ontario, the wound granulating and healthy. Subsequent operations on the skull, in which, by accident or otherwise, I have opened the arachnoid cavity my belief is that it is of no consequence, as in wounds of other serous or synovial cavities, providing the wound is kept open to allow for free drainage of fluids. This was my error in the first operation, but I did not anticipate such

serious results in closing the wound for a few hours on account of the profuse hemorrhage.

An enquiry into the causes of idiocy leads us into a consideration of those conditions which are essential to the manifestation of mental acts. The conditions requisite for a bright manifestation of electricity are insulated cells, proper fluids, pure metal, bright connections, good conductors, size of cells for volume and number for intensity; and, in like manner, the organ of thought, when we examine into its anatomy, is constructed in accordance with certain conditions which are essential to the performance of its functions. These may be divided into: 1 a proper construction; 2, arrangement for nutrition; 3, contact with the world. The brain is a composite organ, a collection of galvanic batteries placed for convenience in one room, the skull, and so connected that certain lines of thought and action are characteristic of the animal to which it belongs; nutrition is provided for by the continuous circulation of a properly constituted fluid, the blood, an equal distribution is effected through the circle of Willis, and the requirements are regulated by the vaso-motor nerves. The ventricular system provides for the maintenance of equal pressure upon the vesicular sheet, which is the seat of consciousness, the appetites, passions, emotions and the intellect, which pressure, or rather support, is maintained by the cerebro-spinal fluid and is regulated by the choroid plexuses which are capable of absorbing or effusing the fluid very rapidly. A serous membrane surrounds the brain, which indicates motion in the mass and allows for the motion of the brain corresponding to the movements of the mind, and which have been demonstrated by physiological experiments upon animals. The machine is set into action by contact with the outer world through the organs of sense. It is obvious that any derangement in the adjustment of these conditions, or defect in any one, must produce a corresponding defect in mental operations, which will be greater or less according to the extent or importance of the defect in the factors.

It is further obvious that defects may exist in parts as well as the whole of the brain, which gives that endless variety of mind by which men differ from one another, and of which every man is an illustration; each man being a modi-

fication composed of the united experiences of himself and his ancestors acting upon his original organism. Happily the division into sexes as observed where high organization exists, by uniting different experiences, neutralizes the tendency to drift into a wide diversity by which we would soon lose our identity of belonging to a common stock. We may then divide mental deficiencies into general and local, or perhaps more properly, into *idiotic* and *perverted*; the former, depending upon causes which influence the entire mass of the brain, includes idiots, imbecile and stupid persons; and under the latter, all derangements of the mind included in insanity, or illustrated in persons with excessive development in some parts of the mind or deficiency in others. Among those causes separately or combined, which influence the entire mass of the brain, and which produce idiocy, are the following:—

1. Arrest of development; either by quality, cerebral sclerosis, or by want of parts.

2. Deficient or irregular circulation in the organ.

3. Poor quality or vitiated blood, accompanied with debility or disease of the entire system.

4. Chronic compression of the cerebral substance; resulting from (a) early consolidation of the bones of the skull; (b) hypertrophy of the brain; (c) effusion of fluid into the cavities of the ventricles or the arachnoid sac.

5. Defect in the senses or isolation from the world, as instanced in case of Gasper Hauser.

Without entering specifically into a consideration of each of these causes, I will be content with a few practical illustrations, though the principles are capable of a wide application in the study of, and for the instruction of human nature.

Among the many conditions of the blood affecting intelligence, I will mention one for the encouragement of those students, (with whom my sympathies are warm,) who are obliged to work at manual labor during vacation, in order to earn the means of subsistence through the succeeding term at college or school.

They often feel dull and stupid at the commencement, and are frequently discouraged when comparing themselves with others who have not been obliged to labor as they have done. The reason of this is to be found in the fact that

the blood is an exact counterpart of the body. Exercise produces hypertrophy of muscular tissue, and hypertrophy of muscular elements in the blood. In one who has never put forth mental effort there is a poverty of brain element in the blood, and consequently from insufficient nutrition the organ is easily tired out and is incapable of sustained effort. Each succeeding term, however, will tend to restore the balance of brain and muscular elements, so that, eventually, they will graduate, perhaps not with honors, but, with what is better, strong bodies and minds capable of contending with the difficulties of after life.

The actions of the mind are largely influenced by conditions of the sympathetic nerves which regulate the calibre of the vessels. In an irritable state of this system the individual is very subject to excessive emotional excitement, and is incapable of acting with sound judgment, since the activity in the seat of the emotion absorbs all the circulation in the brain, and contraction of other vessels renders other parts of the organ bloodless, a condition unfavorable to an extended consciousness which is necessary for comparison. The emotion upon rising in an audience frequently divests a man of ideas.

Hypertrophy of the brain is observed in those children who were precocious when young, but, as they grew older became stupid, often disappointing parents and teachers who have pushed the development of the brain by over stimulation, until they have defeated themselves by increasing an organ beyond the capacity of the cavity in which it is contained. Size of brain is no indication of power, unless it is associated with other necessary conditions. Education is a subject which requires a careful consideration from a physiological aspect, for practically intelligence is made up of the ordinary chemical and physical forces, working under the influence of construction, and, when we attempt to modify nature, it should be done with a knowledge of and in consonance with her laws. "Blind Tom" illustrates a condition of partial development of the brain, in which the musical talent was in excess, and absorbed all the mental power that was in him, and shows to us the extent to which our ordinary faculties are capable of expanding under favorable circumstances. The worst form of partial

idiocy is moral depravity, associated with a high intellect and strong passions. Of strong impulses, associated with a moderate intellect, a good digestion and circulation, are composed most of our best men. They are endowed with an enthusiasm and power, which, without observing the multitude of obstacles at a distance, they surmount each as they arrive by the force of their nature; while a towering intellect associated with weak desire stands at the foot of the ladder, contemplating the rungs, and concludes that a view of the landscape is not worth the trouble of ascending.

As an illustration of the influence of bodily construction upon intelligence; I observed, in dissecting recently the body of a young man who died of epilepsy, that the arteries of the lower extremities were very small, the abdominal aorta would scarcely admit the point of the little finger, being more nearly the size of the common iliae. He had always suffered from weak circulation in the lower extremities, had occasional epileptic attacks, was very clever, and could sustain long continued mental labor, requiring very little sleep, perhaps three or four hours at most in a day. He had a small head, and probably owed his superior ability to the peculiarity in the distribution of his blood, rather than to development of brain. How many sleepless, restless epileptics have figured in the world's history!

The treatment of a case of idiocy would be suggested by a correct knowledge of its pathology. My experience is very limited, and this paper is put forth to stimulate enquiry. Some cases which appeared to be the result of innutrition and rickets I have put upon a tonic treatment, with pulverized egg shells in milk three times daily, with fresh air and nourishing food. One case, especially, improved mentally very rapidly, but died in a few months of diarrhoea.

I have removed portions of the skull in two cases, one of which, as stated, improved very much, the other very little.

It remains to be carefully distinguished between those cases where an operation would be useful and where it would not.

Systematic and intelligent education is very important, though I am convinced that the operation, in the case reported, was the means of giving capacity to the child, whether it was by

giving room to, or by stimulating the brain into action. Falls upon the head have been known to produce even more marked results. In the last case the wound healed very rapidly, there was no irritation, and it entirely recovered from the operation in a week, though I removed three lifts at one time, exposing a large surface which had been depressed since birth. The dura mater under the depression in the skull was very thick and opaque, and was sawn through in the operation, from which no harm whatever resulted. The brain was very pale in color.

The child improved somewhat in taking its food and in a few bodily movements, but after a month or so it relapsed into its former condition. Its attention can be attracted for a short time and the face wears a more discontented look than formerly. The parents reside in an ill-ventilated house, and little attention is given to the child beyond what is required for the wants of nature.

My reason for not reporting this case in full in this connection is, that after a careful consideration of the case, I was prevented from carrying out my views in reference to it.

The treatment of partial conditions belongs to the psychologist, the principle, however, is, that mind acting upon mind, is capable of exciting action in dormant faculties by sympathy, and, by a persevering repetition, they are awakened into an activity which is self-sustaining by the increased flow of blood directed to the part during the education, and the subsequent enlargement of the vessels is the physiological process that takes place in reform.

I should think that a great deal might be done in the treatment of the insane by a proper selection, and placing together those deranged minds which would have a beneficial influence upon each other, rather than, as I have observed in asylums, an indiscriminate commingling of all sorts into one pandemonium of confusion, a short residence in which would be enough to make a sane man mad.

[Since this paper was read before the Medico-Chirurgical Society, my attention has been directed by Dr. R. P. Howard, of this city, to a work by Griesinger, (of which, at the time, I was totally ignorant,) in which the causes of idiocy are fully treated. I am not aware, how-

ever, that the aid of surgery has ever been called into requisition in the treatment of this deplorable condition.]

531 Wellington Street.

CASE 7. *Excision of the Uterus for Fibro-Cystic Disease*, by E. H. TRENHOLME, M.D., B.C.L., Professor of Midwifery and Diseases of Women and Children, Bishop's College, Montreal; Founder and Physician Accoucher to the Woman's Hospital of Montreal, etc., etc.

(Read before the Medico-Chirurgical Society of Montreal.)

The following interesting and instructive case is briefly offered to this society:—

The patient, Miss R. McG., first seen by me on 4th March, 1878, is of Irish descent, aged 37 years, dress-maker and of good family history. Her general appearance indicates good health, but very spare in flesh, and that peculiar expression of face met with in cases of abdominal tumor. Complexion fair; hair dark brown, and very regular habits of life. Temperature of surface of body normal, has no enlargement of any glands, no eruptions over body, no ulcers nor varicose veins. Very rarely she can detect slight cedema of feet; mammary areolæ slightly marked. By inspection, the whole of the abdominal walls are distended to their utmost capacity. There is protrusion of umbilicus, and also slight separation of the abdominal wall between ensiform cartilage and umbilicus. Position does not change contour of abdomen.

Measurements are: girth at umbilical level 45 inches; from ensiform cartilage to umbilicus, 12 inches; from umbilicus to symphysis pubis, 13 inches; from right ant. sup. sp. of ilium to umbilicus, 14½ inches; from left do. do. to umbilicus, 12½ inches. The tumor was not moveable, and no adhesions determinable. The parietes were thin and linæ albicantes not seen. There were no prominent or distended veins. Fluctuation very distinct over the whole surface. There was no impulse, no crepitation, nor tenderness. Percussion note dull everywhere except in either lumbar regions, where it was tympanitic. The pressure of the tumor occasionally causes frequent micturition.

The uterus is high, and towards left side inclined somewhat to left side. It was very slightly moveable. The os appeared congested, otherwise not abnormal; depth of cavity by sound, 2½ inches. Vagina, normal, but somewhat elongated and pointing toward left side; rectum and anus normal.

Menstruation generally very regular, but some-

times occurs in five weeks and at other times as often as three weeks. During the early part of her illness she used to loose a great deal, the flow often lasting seven or ten days.

About three years ago had arrest of the menses for three months. Never been troubled with leucorrhœa to any serious extent.

Occasionally has been troubled with incontinence of urine, but not aware of any other urinary difficulty, except that sometimes it is of higher color than normal. Sp. gr. of urine 1014. No albumen or deposits, and quantity two pints in 24 hours. Tongue, clean; appetite, fair; bowels, regular and occasionally slight flatulence; no thirst; sleeps well; no form of nerve trouble; respiratory organs, normal; can sleep best on her right side; pulse, 88. There is slight murmur with first sound of heart.

*History.*—Her first illness began sixteen years ago when she had a severe fall from a carriage, the horses having run away. She had a severe metrorrhagia, which her medical attendant, the late lamented Dr. R. L. Macdonnell, could only arrest by resorting to the tampon. She suffered at the time from severe pains in the womb, groin and over pelvis; also, a most distressing bearing down pain in the uterus. For the following five years while her general health was indifferently good, yet was able to attend to her duties. The present growth was detected some eleven years ago, and has continued to increase in size, but more rapidly the last six or nine months.

For last six years has been troubled with pains and numbness in both legs; more in the right when lying down. These pains are becoming worse. Is not troubled with nausea, constipation or pains in the breast. Menstruation is painful. During the growth of the tumor, has not been much troubled with dyspnœa, tympanitis, febrile attacks, nor any inflammations of either the tumor or peritoneum.

March 16.—Drew off with aspirator 210 oz clear viscid fluid, slightly straw colored, sp. gr. 1015.

*Diagnosis.*—The history of the case led me to give a doubtful diagnosis, but I deemed it before tapping, an ovarian cyst. After tapping, was inclined to think it uterine fibroid, but was not decided as to its nature or connections.

*Prognosis.*—From the rapid growth and growing discomfort and restlessness, life would not, in all probability, last more than two or three months.

*Operation.*—Reported by Dr. C. A. Wood, There were present at the operation: Drs. Hingston, Robillard, Fuller, Wood and Mr. Young.

Dr. Fuller administered ether at 11.15 a.m., and at 11.30 Dr. Trenholme began the operation by making an incision in the median line, five inches in length, and extending from below the umbilicus to four inches above the crest of the pubes. The skin, fascia, sheath of the rectus and the muscle itself were successively cut through until the operator reached the peritoneum. On opening the peritoneal cavity by a single cut half an inch long, there flowed out about 410 ounces of a clear sero-albuminous fluid, which soon coagulated on standing. The peritoneal opening was now enlarged to the size of the parietal incision, the tumor brought to view and explored. The anterior portions were found to be reddish, vascular, solid and lobulated, and they had contracted several adhesions to the walls of the abdomen. One of these adhesions, situated about one inch to the left of the incision was about three quarters of an inch long, and of the same size as the index finger. It seemed to be perfectly organized and well supplied with vessels, so that it was found necessary to apply a double ligature to it. The first incision was now enlarged four inches upward and to the left of the umbilicus, and downward, about an inch. Further adhesions were now discovered with the omentum, and from one other in the left hypochondriac region there was considerable hæmorrhage. Between the omentum and the tumor there ran four or five enlarged veins, lying loose in the abdominal cavity, about the size of the little finger and eight or ten inches long. Venous hæmorrhage and bleeding from the smallest arteries were arrested by means of Pean's forceps, carbolized hemp thread being used for ligaturing the larger vessels. The whole mass of the tumor was now isolated, and it was found to spring by a very broad pedicle from the upper part of the right side of the fundus of the uterus. The pedicle was now divided, and found to be at least  $3\frac{1}{2}$  inches in diameter, and quite solid. As little or no bleeding took place from the divided vessels in it, there was no necessity for applying a ligature. The left broad ligament contained a cyst of about the size of a hen's egg. This was removed. The uterus itself was found to be the seat of a large fibroid growth, and it was deemed best to remove it also, which was done by cutting through the organ half an inch about its junction with the vaginal walls, it having been transfixed and ligatured. There was considerable hæmorrhage from the uterine and ovarian arteries, but these were secured by ligatures. The ovaries were found to be cystic, and were consequently re-

moved. Drainage was provided for through the vagina, a horse hair having been introduced by means of a curved needle into the abdominal cavity through Douglass' *cul-de-sac*. The patient's breathing, which up to the present time had been pretty regular, now became shallow and irregular, and the pulse after flickering for some time left the wrist. She was given a teaspoonful of brandy with  $\frac{1}{4}$  gr. of morphia, which she barely managed to swallow. After all hæmorrhage had ceased from the vessels divided during the operation, the wound was closed by six deep hempen and five superficial horse hair ligatures, and the patient removed to bed.

From the syncopic state into which she had fallen she never recovered, and notwithstanding that everything was done to bring about reaction, she ceased to breathe twenty-five minutes after the conclusion of the operation, and one hour and forty-five minutes after the operation began. The tumor weighed fifteen pounds.

*Description of Tumor.*—By Dr. Wilkins, who examined the growth states that it is of a fibro-cystic character.

*Remarks.*—The operation was completed although the precise character and connections of the growth were not determined till it was undertaken.

The excision of the uterus though under these circumstances very desperate, yet was the only course that seemed proper to pursue. The cystic mass could not be safely detached on account of its remarkably broad attachment to the uterus, and moreover, the uterus itself was in a highly diseased state, rendering its excision absolutely necessary. The chief causes of failure in saving her life were the enormous and extremely vascular character of the adhesions, which were difficult to separate and yet more difficult to prevent from bleeding.

32 Beaver Hall,  
MONTREAL, March, 1878.

*A Case of Acute Hydrocephalus.* Reported by E. H. TRENHOLME, M.D., Professor of Midwifery and Diseases of Women and Children, University of Bishop's College, Montreal, etc., etc.

The little patient in this case is a boy, 21 months old, and of very good general development. The parents are healthy, and the child was always well till within the last few weeks, since which time it has been very restless and troubled with diarrhœa. During the last few days blood has been occasionally noticed in the stools.



The child was first seen by me on the 23rd of March, when it was suffering from teething. It was placed upon treatment, and appeared so much better that, on the 30th, there seemed to be no ground for serious apprehensions concerning his health. On Monday, the 1st of April, was not so well, but I was not sent for till Tuesday afternoon, when the child was found to be laboring under an attack of acute hydrocephalus. Pulse rapid; bowels confined; starts up in sleep; very restless; sleeps on left side only. Was ordered pot. iod. and pot. brom.

Wednesday, 3rd.—Child not so well. Circulation of surface very much impeded. Left hand very cyanotic; feet cold, but not so cold as the hands. Is semi-comatose. Right pupil somewhat enlarged, but sensitive to light. Left pupil widely dilated and scarcely affected by light. Breathing labored, and veins in head large. Fontanelles tense and bulging.

*Diagnosis.*—The whole of the symptoms pointed to coma from cerebral congestion. In this case the condition of the surface exhibiting no travelling flushes indicative of coma from irritation, as was so well pointed out by Dr. W. Fuller, in an able paper read before this Society, some time ago.

The symptoms being urgent, it was decided to open the brain cavity, and allow the fluid a way of escape. The point selected for the incision was at the lower part of the anterior fontanelle, between the right parietal and frontal bones. I was assisted by my friend Dr. Henry Howard, who heartily concurred in the proposed treatment. After being anesthetized, the scalp was raised over the above part by means of an L shaped incision. The membranes were then carefully divided by the point of the knife to the extent of about 1-16th of an inch, when a jet of blood spurted out with much force to a distance of several feet, followed by a steady stream of dark venous blood. After a moment or two the blood seemed to be diluted with serous effusion. The wound was left open till about four ounces of fluid had been allowed to pass off, when it was closed by three sutures, which effectually prevented further bleeding. This opening into a vein communicating with the longitudinal sinus was an unexpected circumstance—at the moment deplored—but soon found to be of very great service, in mitigating the urgent symptoms under which the

child was laboring. The surface assumed a more natural color; the feet became warm and remained warm afterwards. Not only was there relief to the nervous compression; respiration became more easy; heart's action less excited; pupils sensitive to light, and both of nearly the same size.

In the course of a few hours the child was not only evidently better, but regained a certain amount of consciousness, and, for the first time during several days, took notice when spoken to, and prepared itself to take food when it saw it being brought to it.

Thursday, 7 p.m.—Not so well; symptoms of cerebral irritation are making their appearance; bowels open; skin warm and of good color. Takes food to some extent. R. Pot. brom. and chloral.

Friday, 8.30 a.m.—Well marked tetanic spasms; skin hot, but circulation good; rested badly during the night; still takes food; left pupil larger than right one. 7 p.m.—Opisthous well marked; spasms easily induced; even loud talk or a touch causes them.

Saturday, 10 a.m.—Spasms nearly gone; had a better and quieter night; takes food; skin warm; pupils large and insensible to light. 5 p.m.—Seems much better; sleeps tranquilly; bowels opened well; takes food; applied a small fly blister behind each ear.

Sunday, 10 a.m.—No return of spasms sleeps; quietly on either side; pulse less rapid than yesterday; veins of scalp are blue and congested; fontanelle tense. There were no changes in the symptoms up to death, which occurred on Monday, at 6.30 a.m.

Post-mortem.—Six hours after death, assisted by Dr. Wood. The only part examined was the region of anterior fontanelle. It was found that the vein of right side, communicating with the longitudinal sinus, had been opened. There was no fluid between the membranes; no tubercles on the meninges. The tension of the fontanelles was probably due to effusion into the ventricles of brain.

*Remarks on Catarrh, Hay Fever, and Diphtheria,* by DONALD BAYNES, M.A., M.D., L.R.C.P., Ed., Lecturer on Diseases of the Throat, and Electro-Therapeutics, University of Bishop College. Read before the Alumni Society of Bishop's College, April 8th. 1878.

MR. PRESIDENT AND GENTLEMEN,—In this

papar which I have the honour to read before you this evening, I do not propose to enter into a lengthy discussion of the pathology, and various theories which are promulgated regarding the diseases which I am about to mention but simply to confine myself to a brief mention of them, and describe the treatment I have found most successful. I do not by any means pretend to originality, but, having tried many forms of treatment, to give you what has proved most successful in my hands.

I. *Post-Nasal Catarrh*.—This disease, though one of the most prevalent in this country, is, as far as I can learn, but very little understood. The principal cause perhaps of this imperfect knowledge is the few opportunities afforded for a pathological examination of this disease. This is chiefly due to the fact that few, if any, die from post-nasal catarrh. Where those who have been sufferers from this disease die, the fact of a catarrh having been present is usually unknown or forgotten, as the disease which has carried them off has occupied the entire consideration of the attending physician. For no disease perhaps are so many specifics and patent nostrums advertised, as, for example, the innumerable powders, snuffs, douches, inhalations, etc., that may be seen placarded on every fence, and advertised in nearly every newspaper. I may mention that I have tried many of these

remedies, but have found them utterly valueless. The douches, I would warn you against, as there is ample proof of their harmful effects on the organ of hearing. They are very frequently the cause of purulent otitis and deafness. Dr. Roosa, of New York, speaks strongly against their use; he says that the use of the nasal douche often causes acute inflammation of the ear, and recommends that its use be discountenanced by the profession. The harmful results are due to the entrance of the fluid into the cavity of the tympanum by the eustachian tubes. He says: "The fact is, that when one side of the nasal cavity is entirely filled with fluid by hydrostatic pressure, while the patient is breathing through the mouth, the soft palate completely shuts off the superior pharyngeal space from the mouth, and does not permit any of the fluid to pass downwards, the fluid then passes into the opposite cavity and escapes through the nostril." Now it is easily seen that if the eustachian tubes happen to be more than usually pervious, or if the pressure of the fluid is excessive, more or less of it may be forced into the tympanic cavity; this occurrence has not unfrequently led to disastrous results.

Dr. Roosa, in his work on diseases of the ear, gives an analysis of sixteen reported cases of injury to the ear from the use of the nasal douche.

| <i>Patient.</i>                                       | <i>Instruction in use of douche</i> | <i>Fluid used.</i>                       | <i>Ear Disease.</i>  |
|---|-------------------------------------|--|--|
| 1. Rev. Dr. C. ....                                   | A Physician .....                   | { Warm solution of<br>carbolic acid..... | { Acute otitis media suppurativa,<br>pyæmia—recovery.                          |
| 2. Dr. Frank. ....                                    | Dr. Frank .....                     | Cold water.....                          | Acute otitis media—recovery.   |
| 3. Mr. D. ....  | Dr. Roosa .....                     | Warm solution of salt<br>and water ..... | { Perforation of both membrana<br>tympana—recovery.                            |
| 4. First of Dr. Pardee's cases...                     | A Physician.....                    | Do. ....                                 | Otitis media suppurativa, necro-<br>sis of middle ear—permanent<br>deafness.   |
| 5. Second do.....                                     | Do. ....                            | Salt and water.....                      | Acute otitis media—recovery.   |
| 6. A Physician.....                                   | Do. ....                            | Unstated .....                           | { Otitis media suppurativa chro-<br>nica.                                      |
| 7. Patient at Manhattan Eye<br>and Ear Hospital ..... | Unknown. ....                       | Unknown.....                             | Otitis media acuta—recovery.   |
| 8. Mrs. C., Dr. Mathewson's<br>case .....             | Physician .....                     | Warm fluids .....                        | Otitis media acuta—recovery.   |
| 9. Dr. Hackley's case.....                            | Unknown.....                        | Warm salt and water                      | { Otitis media suppurativa chro-<br>nica supervening on old per-<br>forations. |
| 10. Dr. Piffard's case .....                          | Do. ....                            | Warm fluids .....                        | Otitis media acuta—recovery.   |
| 11. Judge—.....                                       | A Physician .....                   | Unknown .....                            | Deafness—recovery.   |
| 12. Dr. Loring's case, a physi-<br>cian .....         | Do. ....                            | Warm fluids .....                        | { Otitis media suppurativa chro-<br>nica.                                      |
| 13. Dr. Mathewson's 2nd case ...                      | Do. ....                            | Unstated.....                            | Otitis media acuta—recovery.   |
| 14. Dr. Mathewson's 3rd case....                      | Do. ....                            | Do. ....                                 | Otitis media subacuta.   |
| 15. A Physician .....                                 | Do. ....                            | Warm salt and water                      | { Fainting and otitis media ca-<br>tarrhalis.                                  |
| 16. Dr. O. D. Pomroy's case.....                      | Dr. Pomroy .....                    | Do.....                                  | Otitis media suppurativa.  |

To treat this disease a good lamp mirror and laryngoscope are absolutely necessary, an adept in rhinoscopy can often see the entire superficies of the naso-pharyngeal space.

This disease is no respecter of persons, all classes, sexes and ages are liable to it, and, unlike others, when once it has laid hold of its victim, no change of climate or other hygienic measures will eradicate it, though a dry equable climate may somewhat delay its progress. A cold damp atmosphere, in connection with great and sudden changes of temperature, seem to be very favorable for its production and growth. Some seem to be constitutionally predisposed to this complaint. Occupations where there is much exposure to dust seem to favour its development, though none seem exempt from it.

Is catarrh a local or constitutional affection?

Niemeyer claims that nasal catarrh is purely local in its nature and its cause.

Dr. Beverly Robinson, in a paper read in the New York County Medical Society, (Sept. 27, 1875) says as follows: "While we believe, therefore, that certain accidental conditions may be instrumental in its manifestation in the first instance, we are convinced, in an equal measure, unless a special constitutional tendency exists in the individual, that he will but rarely take it and develop it to any very great and annoying degree." Dr. Robinson sums it up as follows:

1st. That catarrh of the post-nasal passages is merely a local determination of a diathetic condition.

2nd. That it is essentially the same affection with chronic follicular disease of the throat and remaining portion of the air passages.

Besides the catarrhal diathesis pure and simple, we may have it combined with the herpetic, gouty and serofulous. This must be borne in mind in the treatment. There may be also periodic and specific complications, which will require proper anti-periodic and specific remedies.

Symptoms of post-nasal catarrh or follicular disease of the naso-pharyngeal space:

1. Stuffiness or fullness of the nasal passages, with a frequent desire to clear them, but an inability to do so.

2. More or less pain or feeling of weight at the junction of the nose and forehead.

3. Falling or trickling down of mucus from the posterior nares, and from above the soft palate; the quantity and quality of the mucus depending on the extent and severity of the disease.

4. On examination, the post-pharyngeal wall has a dry, glazed appearance.

5. Frequently there is a horribly offensive smell and taste, the result of decomposition of hardened masses of mucus.

6. Hardened masses of mucus acting as foreign bodies often produce ulceration and eventually necrosis.

#### *Treatment.*

1. General hygienic measures to keep up the health and strength must not be neglected, as bathing, plenty of out-door exercise; to this may be combined a suitable tonic treatment, as this is essentially a disease of debility, as, for example: iron, quinine, cod-liver oil, arsenic, etc. Of course when this catarrhal diathesis is connected with the gouty, syphilitic, herpetic diathesis, etc., the appropriate treatment of these various diatheses must not be neglected.

2. Having paid attention to the general, hygienic, and tonic treatment of our patient, we must now administer some remedy or remedies, having a special action on the mucous membrane.

Dr. Beverly Robinson, of New York, in his monograph on post-nasal catarrh, states that he has tried nearly all the agents in the pharmacopœia having a useful therapeutic effect on diseased mucous membranes; the ones he specially recommends (and which I can endorse, having tried them myself and found them very useful) are *sulphur*, *cubebæ* and *ammoniacum*. He gives the sulphur in the form of sulphur water from the *White Sulphur Spring of Sharon*, in doses of a tumblerful three times a day. (The water from the Missisquoi Springs is also very useful.)

For the cubebæ he gives the following formula:

|    |                       |            |
|----|-----------------------|------------|
| R̄ | Pulv. cubebi.....     | ℥ ij.      |
|    | Syrup. aurantii ..... | ℥ ij.      |
|    | Aq. menth. pip.....   | ℥ ij.      |
|    | Aquam ad.....         | ℥ viij. M. |

Sig—A teaspoonful every two or three hours, according to the tolerance of the patient and the amount of the secretion.

If the cubebs produce nausea, diarrhœa, or the cubeb rash on the skin, lessen the dose or stop its exhibition for a few days, as it is well known this drug is in part eliminated through the glands of the throat and nose; if its use be faithfully persevered in, it will be found that it has a decided action for good in this disease, by modifying and lessening the amount of secretion, and removing the offensive odour. The cubebs should be exhibited in the form of powder (*fresh ground*). The resin does not yield good results, nor will the powder, unless *fresh ground*.

Ammoniacum will be found useful in many cases and may, with benefit, be combined with carbonate of ammonia and ipecacuanha. Buchu (fluid extract) will give great relief in some cases, 3 ss. two or three times a day in water. The ammoniacum may be given in doses of grs i.-iij. three or four times a day.

When there is evidence of malaria, quinine and arsenic are indicated. Gouty patients will be benefited by guaiacum. Specific cases by small doses of mercury (biniodide or protoiodide) scrofulous and tuberculous by cod liver oil, change of climate and the usual treatment for such.

3. *Local Treatment.*—This consists of the topical application of medicated vapors, fluids and powders. The fluids may be applied by means of a douche, a post-nasal syringe, an atomizer or a brush. The douche, as I have before stated, is dangerous, and should be avoided. The post-nasal syringe, Davidson's or Warner's. (I prefer the latter, as by its means the greater part of the naso-pharyngeal space may be easily covered with the solution and without danger to the ear.) The atomizer with its fine medicated spray is, however, by far the best way of giving this form of application. For the consulting room or for the hospital, I would recommend Darrow's air pump with one of Saas' atomizing tubes. These latter have their tips turned so that the spray can be directed either up or down or in a straight direction. For the use of patients at their home I usually order a hand ball atomizer, as Delano's throat spray. The brush is camels hair fastened to a platinum rod and bent at an acute angle. The solution for the spray should be tepid (70° to 80° Fahr.) I usually use salt and water, or the following formula of Dr. Dobell, London:—

℞ Acid carbol. (Calvert's) ℥ 40  
Sodæ bibor..... 3 ij.  
Sodæ bicarb..... 3 ij.  
Glycerin. (Price's)..... 3 j.  
Aquam ad..... 3 viij. M.

The solutions I am in the habit of using with the brush are chloride of zinc (3 ss.—3 j) or carbolic acid.

Dr. Francis W. Campbell has given me the following prescription which he has found exceedingly beneficial:—

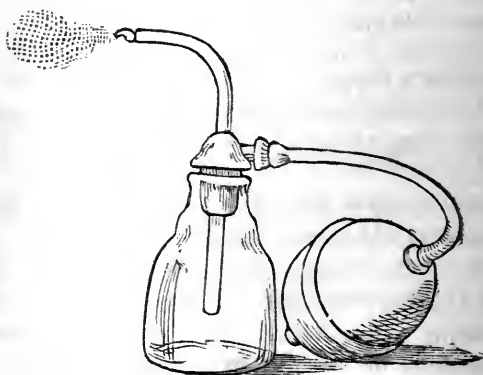
℞ Acid carbol. puris.  
Liq. ammon fort a a 3 iss.  
Spts. vini rect..... 3 ii.  
Aqua..... 3 ss. M.

Take a wide mouthed glass-stoppered bottle and fill with cotton-wool. Saturate the wool with the above. The vapor from the bottle is to be drawn into the nose eight or ten times daily, and now and then inhaled through the mouth.

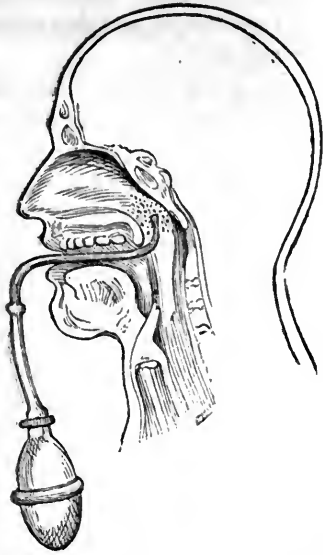
The powders are used by means of a powder-blower, this directs the powder either in a straight direction for the anterior nares or by means of a movable tip bent at an acute angle in an upward direction for the posterior nares.

Useful powders are iodoform, bismuth, camphor, salicylic acid, etc., in various combinations to suit the particular case; a proper treatment perseveringly carried out will cure the majority of cases of catarrh, and those that are not entirely cured will have their sufferings so materially alleviated as to pass their life in comfort. For this result, however, each case must be made a special study, as the treatment is not a routine one, and must be varied according to the case.

The following wood cuts represent some of the instruments mentioned above.\*



DELANO THROAT SYRINGE.



WARNER'S POST-NASAL SYRINGE.



POWDER BLOWER.

II. *Hay Fever*.—This disorder is one that has received but passing remarks or meagre notices in most of our works on medicine, and is generally dragged in at the tail of some other disorder. Some never allude to it at all, while others (Trousseau among them) are unwilling to give it either a local habitation or a name.

Trousseau regards it as a periodic asthma, recurring more frequently in summer than winter, and is very loath to allow that new-mown hay, flowering grass, etc., is at all likely to produce an attack. He says: "I question how far emanations from freshly cut hay have any share in the production of the symptoms of hay fever,

and whether the influence of the season is not a much more potent one."

Among the earlier writers on the subject are Drs. Heberden and Bostock (the latter a sufferer himself from this disease). Latterly Dr. Phœbus, Professor of Medicine at the University of Geissen in 1862; Dr. Abbotts Smith, Physician to the North London Hospital for Diseases of the Chest, and Dr. Geo. M. Beard of New York, especially the latter, have given us valuable contributions on this subject. Dr. Beard's is a very excellent work, and shows he has taken great care and trouble in its compilation.

This disease has a tendency to recur annually and sometimes semi-annually in the same individual when it has once manifested itself. It prevails to a greater or less extent in all countries. It attacks both sexes, though men seem to suffer most, in proportion of two to one. Even animals have been known to suffer from it.

This complaint generally first manifests itself in a person about the age of 15, although it has been noticed in an infant of nine months old. In this case, however, the father and other relatives were very subject to it. It also has a tendency to disappear as old age comes on, though the patient then seems very liable to attacks of asthma and chronic bronchitis. The season at which the disorder generally comes on is the end of May or beginning of June, lasting often to the middle of September. The average duration of an attack is, however, from five to six weeks, unless cut short by treatment. Some persons are liable to a second though milder attack in the autumn.

*Causes*.—An hereditary tendency or predisposition is perhaps the chief, though persons whose parents or relatives have suffered from gout or rheumatism seem very prone to attacks. Intermittent fever bears a close relation to this disorder, and may be the beginning or the means of transmitting it to one's offspring.

The first heats of summer, especially if setting in suddenly after a cold, damp spring, usually cause much suffering. The odor of new-mown hay, flowering of grasses, rye, wheat, etc., strongly scented flowers, etc., decomposing vegetable matter occasionally, also other plants, as beans, nettles, roses, lilacs, elder trees, etc., while in bloom, will bring on an attack in those susceptible.

\* Messrs. Kenneth Campbell & Co., have, at my request, imported an assortment of these instruments, which may be obtained at their Branch Establishment, Phillips Square.



The species of grass most productive of this disorder are the *anthoxanthum odoratum* (sweet-scented vernal grass), *holcus odoratus* (sweet-scented soft grass). The *anthoxanthum* begins to flower during the end of May, and continues during July and August. The peculiar odour of flowering grass is due chiefly to the *anthoxanthum* and *holcus odoratus*; this odour is probably owing to the benzoic acid they contain.

There is an analogous affection in the States where roses are largely cultivated while in bloom. It is called rose fever, rose cold or rose asthma.

Dr. Dunglison mentions it in his Practice of Medicine as summer bronchitis. In India it is met with among Europeans in the months of February and March, when mango tree (*mangifera*) and the neme (*melia azadirachta*) are blossoming. An analogous affection is noticed by some after passing through a grove or wood containing larch trees. Their faces become swollen, red and inflamed; their eyes get blood-shot, and a thin mucous-purulent discharge is noticed from the nostrils and eyes.

As in other cases, anything that may weaken the patient tends to increase his sufferings. The symptoms of this malady are arranged by Dr. Phœbus into six groups, viz :

1st. Those connected with the nostrils, and are similar to those of a very severe influenza, especially sneezing, which is very loud and frequent, and recurs in paroxysms coming on at short intervals. This sneezing seems to make the bronchi irritable, and renders them liable to spasm; hence the frequent occurrence of asthma at night during the attack. The nose becomes swollen, tender and inflamed. At first there is no secretion of the mucus, but in a few days there is a considerable discharge of watery, limpid fluid. The sense of smell may diminish, though it is rarely lost; in some, strange to say, it becomes morbidly acute.

2nd. The second group of symptoms are observed in the eyes. We have a sort of catarrhal ophthalmia with increased secretion; heat and a sense of fulness are felt along the edges of the lids. This soon extends over the whole eye, accompanied by acute itching and irritation; the flow of tears is often excessive. The conjunctival lining of the eyelids becomes red and swollen and secretes a thick, yellow matter.

The eyesight is weakened, and there is more or less intolerance of light.

3rd. The third group of symptoms are those of the throat, and, to a certain extent, resemble catarrhal sore throat. The pharynx is red and swollen, with great itching of the fauces and posterior part of the soft palate. We often observe a number of minute inflamed points at the back part of the mouth; often a difficulty with pain during deglutition is observable. The secretion at first diminishes, but soon becomes very abundant. Strange to say, this morbid condition seldom involves the uvula or tonsils, though they may appear redder and more relaxed than usual.

4th. The fourth group are connected with the head, as, for example, headache, either frontal or occipital, more or less severe, sometimes involving the whole head; sometimes it assumes a neuralgic character, and extends along the facial nerve or into the external auditory passage. It is often accompanied by itching about the forehead, nose, chin and ears. Again, there is often giddiness, buzzing or ringing in the ears, etc., etc.

5th. The fifth group of symptoms attacks the larynx, and extends to the bronchi. The mucous membrane of the larynx and the vocal chords become red, irritable and inflamed, and the patient is affected by bronchial catarrh, asthma, cough and dyspnoea. The cough is sometimes very troublesome and loud, and often accompanied by profuse expectoration, the voice becomes hoarse, and is sometimes aphonic. The symptoms become worse towards evening. The patient is often awakened out of his sleep at night by a sharp asthmatic attack.

6th. The sixth group comprise general symptoms, and are of catarrhal fever. The pulse is increased in frequency, specially towards night; we have shivering and cold perspirations; the patient becomes restless, unfit for work, weary, is unable to fix his attention, and finds the exercise of his memory a difficult effort. He is irritable, loses his appetite and is more or less troubled with constipation or diarrhoea, sometimes both alternating, urine is scanty and high colored. The skin is sometimes hot and dry, sometimes clammy and moist, and occasionally profuse perspirations are present; eruptions of the skin as herpes urticaria or nettle rash often appear.

The above symptoms are, of course, seldom if ever, all present in one individual. Some suffer to a much greater extent than others; some are attacked in a manner so mild as to be hardly noticeable.

The prognosis, or the progress and future termination of this disease, is favorable as regards any actual danger to the life of the patient. The annual attack having passed, the patient regains his good health, although asthma, chronic bronchitis, etc., do sometimes follow in its wake, and we must not lose sight of the fact that this disorder frequently becomes complicated with asthma or chronic bronchitis.

There is no reason, however, why a sufferer from hay fever should be refused for life assurance or even pay increased rates, as they live as long and their risk is as safe as others.

We must bear in mind that hay fever is essentially a neurosis, that is, a functional disease of the nervous system; that there must be a constitutional predisposition (generally hereditary) in the individual, for the exciting cause or causes to induce an attack. It is rarely, if ever, found among the poor or laboring classes. It bears a close analogy and may be compared with asthma and sick headache. It does not depend on a parasite as some would have us believe.

*Treatment.*—Though there is no specific or no one remedy that will meet every case, and relief and cure must be sought by meeting the various symptoms as they occur in different individuals, still I may say that judicious treatment will, (even if it does not succeed in eradicating the malady) at any rate cure or cut short an attack and diminish most materially the severity of the suffering. The treatment may be divided into two parts, the prophylactic and the curative. The former means avoidance of the exciting causes. Now, an ounce of prevention being better than a pound of cure, I would advise sufferers, at or before the season of the attack, to avoid the exciting causes, by visiting some place where these do not exist.

1st. A sea voyage (not tropical) this may be regarded as a specific, as it is a tonic, cool and free from vegetable irritants.

2nd. A residence during the time of attack in cool and elevated places, such as the various mountainous regions.

(a) The White Mountains, especially Beth-

lehem, Jefferson, Glen, and Twin Mountain House region.

(b) Adirondacks.

(c) Summit of the Alleghanies.

(d) Rocky Mountains.

(e) Catskills (not useful in very many instances).

(f) Colorado.

Also equable climates, such as California, and some parts of Texas and Mexico.

*Curative or Medical Treatment.*—This may be divided into constitutional and local. Constitutional this should consist chiefly of tonics, sedatives, stimulants and narcotics, to strengthen the system, and allay excessive local sensitiveness, relieve pain and induce sleep.

Quinine, arsenic, and above all electricity, have done the most good in the majority of cases. The treatment should be commenced some time before the yearly attack is expected. The arsenic (Fowler's solution)  $\text{m. iij} - \text{x}$ , after meals may with benefit be combined with tinct. of belladonna,  $\text{m. v.} - \text{x}$ . The remedy "par excellence" is, however, electricity, and should be used in the form of galvanism centrally and locally applied. Electricity, as is well known, is a tonic, sedative, and stimulant, of great power, quickly relieves pain, and its good effects are permanent—a mild continuous current is indicated. The faradic current, though infinitely inferior in its effect on this disease to the galvanic, may be tried if a galvanic battery be not attainable. The electric bath, using both currents, is an excellent mode of application, giving, as it does in all cases, the best tonic results. Iron alone, or combined with nuxvomica or strychnine, would be useful for anæmic patients. Cod liver oil, in cases where its use is indicated. Iodine and bromine have done good in some instances. Occasionally as a sedative and to produce sleep, morphia or chloral hydrate may be given; I think, however, for this purpose the electric bath is as effectual and is certainly safer.

*Local Treatment.*—Here the application of such remedies as will cleanse and soothe the irritated mucous membrane is required and consists of inhalations, sprays and powders or snuffs. Care must be taken not to use strong applications or such as give pain. The sprays may be given by means of an atomizer; liquids in the form of a douche, do harm, instead of good, to

say nothing of their dangerous action on the organ of hearing. The following drugs, in various strengths and combinations, have given the greatest relief, iodine, bromine, carbolic acid, chloroform, camphor, quinine, tannin, salt, (table) glycerine, liq. ammonia, acetic ether, pinus canadensis.

For inflamed conjunctiva, borax and camphor water gives great relief; if the eyelids be swollen, borax and lead lotion will be of great benefit. Ice in the mouth and nose is very grateful where there is much burning. Ordinary cotton wadding enclosed in net and fastened behind the ear in the same way as a respirator, will be very effectual in keeping dust, etc., away from the inflamed mucous membrane, it has the advantage of not interfering with patient's comfort in breathing, etc.

For the asthma, smoking stramonium or inhaling salt-petre papers is strongly recommended.

Hygienic treatment must not be neglected. Being a disease of debility, depleting measures, as low diet, etc., must be avoided. The diet should be ample, varied, nutritious and easily digestible, exercise taken moderately in a cool place. Sufferers should be told that the quieter they keep the better, avoiding sunlight, dust, vegetable irritants.

In regard to clothing, sufferers should be dressed warmly, flannel should be worn next the skin. Sleep is very beneficial, and should be encouraged night and day; loss of sleep aggravates the symptoms. Wearing the beard and moustache has been recommended.

III. *Diphtheria*.—I have now come to my last subject for this evening's paper. I intend to confine myself chiefly to the treatments I have found most efficacious. As to whether diphtheria and croup are one and the same disease; whether the bacterian theory is correct or not, along with the many other theories promulgated, are subjects I do not intend to enter upon, but leave them to be argued out by those who feel so disposed. In my opinion, however, diphtheria is essentially a drain disease, and until a thorough sanitary reformation takes place, we may expect to hear of its ravages steadily and increasingly continued. It is primarily a local disease, followed by constitutional effects. These, however, in severe cases, seem to accompany or co-exist, and in some cases even to precede the local manifestation. As it is an infectious

disease, it must be caused by some infection drawn into the body. This infecting substance being drawn in by the breath irritates the mucous membrane of the fauces, and sows itself there; this seed soon springs up, resulting in the diphtheritic membrane, which is accompanied by the constitutional disease, slight or grave, as the case may be. It may be compared to the blood-poisoning of the wounded, or of the puerperal state; and as is the case in these, the local disinfection is one, if not the most important part of the treatment.

*Treatment*.—In the first place, a very important part of any treatment is, when examining the throat, not to weary your patient, this can hardly be avoided by the usual means of examination, viz., by the handle of a spoon, paper knife, spatula, etc. In these cases the patient is made to sit up, twisted and turned about so as to get the light in the right place. All this may be avoided by simply carrying a laryngoscope when going to see your diphtheria cases. The patient need never move, simply lie still and open his mouth; a lamp, or even a candle, is to be held a little behind and one side of his head. You now put on the laryngoscope, depress the tongue slightly, and you will have the entire fauces well lighted up, and will be able to make a thorough examination without wearying the patient. Another very important point is, *never* use a brush or swab to apply your solutions to the throat. Not only are they very disagreeable to the patient, but, if you brush off the membrane, you simply leave a raw surface for it to re-form upon, and being a raw surface, it will necessarily take a deeper root. I have no hesitation in saying that the patient stands a better chance for life if not treated at all than if he has his throat swabbed or brushed out. The best way of applying your solutions to the throat is by means of an atomizer; I always use Delano's long tube atomizer. The tube is put in the mouth, and a few squeezes of the ball ensures a complete coating of all parts of the throat, even down to the vocal chords; this method is especially useful in the treatment of children. The medicinal treatment I have found most useful (in fact I have only lost one patient since following it, and that patient died two or three hours after I had first seen it, and can therefore hardly be called a fair case) is phytolacca decandra and chlorate of pot-

ash internally; lactic acid and lime water locally. Lactic acid is a solvent to the diphtheritic membrane, and combined, I look on them as the most perfect topical application that has yet been tried. I give drop doses of the phytolacca every hour in a tablespoonful of water; the chlorate of potash, grs. x in an oz. of water; every two hours. I may mention that I give a dose of calomel immediately on seeing the patient, grs. v. to x.; locally I order the application of the following formula every hour by means of the Delano atomizer:—

R Lactic acid ʒ iij. to iv.

Lime water to ʒ viij. M.

When the nares are involved, I order the nose to be syringed out, every two or three hours, with the lactic acid lotion, by means of a proper nose syringe. I usually dilute the lotion for this purpose with one third or one half water. I do not think as a rule there is any necessity for the use of alcoholic stimulants in this disease; in a very few cases, it may however be indicated. The diet should consist chiefly of milk, to which add a little lime water, beef tea, beef juice, eggs beaten up with milk. Lemonade makes a very agreeable drink and is usually much liked by the patient. The milk must be given frequently as a patient usually objects to much at a time.

As a preventive to the spread of the disorder throughout the house, isolate both patient and nurse in an upstairs chamber; and nail over the door, a large sheet, which should be kept well sprinkled with a solution of carbolic acid, or Condy's fluid also sprinkle the floor; and soiled linen with the same, all discharges should be well disinfected.

There are some excellent rules given for the treatment of diphtheria, by Dr. C. E. Billington of New York, in the New York Medical Record, for Jan. 12, 1878, which would heartily recommend to your perusal.

*Valedictory Address to the Graduates in Medicine of the University of Bishop's College*, delivered at the Seventh Annual Medical Convocation of the University, held in the Synod Hall, Montreal, April 11th, 1878. By RICHARD A. KENNEDY. M.A., M.D., C.M., Professor of the Theory and Practice of Surgery.

MR. CHANCELLOR, LADIES AND GENTLEMEN, My brethren in the Medical Faculty having this year

appointed me to deliver to our graduating class the usual closing words of advice given on such occasions as this, it has become my duty and privilege to address them for the last time, imparting such counsel as may be required to guide them in the future, and stating some of the obligations they have this day assumed.

*Graduates in Medicine*, in the name of the Medical Faculty of Bishop's College, I present you now their most sincere congratulations for the successful manner in which you have arrived at this honorable termination of your collegiate studies. The pleasure of doing this is tempered with regret, for now the bond is severed which hitherto united us together as pupils and teachers. In the future your friendly greetings and well-known faces will be missed, but we trust that each of you leave us to enter on a career of usefulness and distinction which will redound to your credit and reflect honor on your Alma Mater; inducing others to follow your example, and seek in this University the foundation of their future calling.

Although our relations are thus ended, we trust, as brother practitioners, that you will continue to regard us as friends, and I express the feelings of each member of this Faculty in saying that it will always give us great pleasure to hear of your welfare and of the success to which your merits are entitled. For a number of years you have been diligent in seeking a knowledge of the science and practice of your chosen profession, and to-day have attained the highest distinction in Medicine which this University can dispense. As a result of close application to your studies, you were enabled to acquire yourselves creditably at your examination, and in return have not only been honored with the degrees in Medicine and Surgery, but also go forth fully accredited to the public, for whose benefit you are henceforth to labor, and to the profession with which you are now numbered. This is your reward, and in addition to this there is the gratification of knowing that you enjoy the confidence of those who, from being your instructors, have had the best opportunity of judging of your capabilities. You leave behind you an encouragement to others to follow in your footsteps, and this inheritance will stimulate your successors to seek a like satisfactory termination. To-day a fresh page in the book of life has been turned, a new era commenced, and from the class

room you proceed to take an active part in the duties of life. No revolution in mind or character is implied by this step, nor have you acquired all that is essential in medical practice for the cure of the various ills to which flesh is heir. It does not rest with you merely to apply the knowledge which you now possess, for diligent students you must ever remain if you expect to rise to eminence or distinction. As the boy is father to the man, so does the zealous student presage the earnest practitioner, and it is your duty to more thoroughly qualify yourselves for the responsible position in which you are now placed. I hope that none of you have labored merely to satisfy your examiners, and now look forward to a remission of your exertions; be assured that should your ambition not lead you onwards, you will not only be a dishonor to this profession, but will inevitably bring a disgrace upon yourselves. I trust that you have too high a regard for this noble calling ever to bring upon it the disrespect which would follow such a course as it is your interest and duty to devote yourselves to the advancement of knowledge. Let the labor thus involved be one of love for the work itself.

In leaving us I confidently trust that your minds are well furnished with the fundamental principles of medical science, your ideas and thoughts so disciplined that you will not be carried away with every new theory that may arise without having given it due reflection and consideration.

It is in the proper training of the mind that the great value of a collegiate course is exemplified, for a correct habit of thought is one of the great essentials for success in every walk of life, and in none is it more necessary than in the medical profession, seeing that the future happiness and welfare of others so often depend upon the intelligence and stability of the physician. Habits once formed are difficult to break. There is one which I would especially caution you to avoid acquiring, one easily formed and towards which there is a strong temptation in the cares and anxieties of professional life—I mean that of taking stimulants. Once contracted the tendency is to degeneration; pernicious in its effects, it brings disgrace and poverty upon its victims. How many fair prospects are blighted where honor and success might otherwise have been achieved. Avoid this, be always prompt and

attentive to the calls made upon you, being punctual in the observance of your duties and faithful to the trusts reposed in you.

Gentlemen, your chosen profession is one of the noblest that man can follow. In no other department of human learning or enterprise has so much been effected in extending the period of human life or ameliorating the condition of our suffering and dying race, nor has any other employed a greater amount of intelligence, labor and self-sacrifice in their improvement. Requiring some knowledge of nearly every science, extracting from the most varied sources information which bears upon our daily practice and theories, the medical profession becomes at once the most liberal and just of all human studies.

So liberal is the tendency of its teaching that its followers are often accused of atheism and infidelity. I believe no greater libel can be uttered, for although, as in other walks of life, there may be those who scoff at religion, there are a greater majority who humbly follow in the footsteps of the Divine Physician, and I am sure there is no other class of men who are more often called upon to perform acts of charity and benevolence, and who do so more willingly without hope of fee or reward. Witness the work done in hospitals and kindred institutions, in which time and talents are freely given for the benefit of others, as also the constant risk of infection and possible death in hotbeds of fever or among loathsome diseases to which the physician is so often called upon to attend. In all times the medical profession has furnished a large quota to the ranks of scientific workers. The very nature of its aims and studies often lead its followers into patient investigation of kindred sciences, and yet, though its members have done so much for humanity, how slight in proportion have been the rewards, judging from a worldly standpoint? The conservator of mankind does not receive the same consideration as the soldier who distinguishes himself in the successful slaughter of his fellows or the subjugation of mankind.

Jenner may discover means to save the lives of thousands or a Simpson bestow upon us the power to render painless severe operations upon the living body, and pass to their rest almost unhonored and unsung, except by us who revere their memory and honor their opinions.

Medicine is a progressive science, always advancing, and this in consequence of its great



comprehensiveness in embracing so much that is not yet fully known.

A long time must elapse before it can be placed on the list of exact sciences. It does, however, possess fundamental truths and principles, and, in all probability, in the future there will be discovered fixed laws governing the natural causes and remedies of disease, and that these will be found as constant as the laws controlling chemical changes and combinations.

As the great object of our profession is the cure or alleviation of suffering humanity we are constantly impelled to study the character and influence of disease so as to discover those truths and principles which govern the latter and to apply them for the benefit of mankind.

Such are the aims of our profession, a profession which bestows upon its followers an influence in every community, whether savage or civilised, and which can be traced backwards into the most remote ages, wherever a record has been preserved. What a difference, however, exists between the savage medicine man, who trusts to his sorceries and charms and those great minds of civilized nations who are ever evolving truths? It is a step from darkness into light, from superstition to reasonable research. During the greater part of this century medical science has made wonderful and rapid advances. Fifty years ago many diseases were but imperfectly known or were overlooked; these have now by patient enquiry, by microscopic investigation and careful post-mortem examination, become understood, and their treatment placed upon a more reasonable and scientific basis. While our profession has thus been making great strides towards a more perfect state new theories and doctrines have from time to time assailed it, by the promulgation of partial and exclusive systems of medicine.

These systems generally originate with individuals endowed with great ingenuity but with minds imperfectly trained; such will always find followers.

Some who oppose the regular profession contend that all remedies should be taken from the vegetable kingdom, denouncing remedies which have been tested by the experience of ages; others confine their's to external agents only; while another class insist on the exclusive use of such minute doses as to preclude the possibility of any results but what might be derived from

the power of imagination or the effects of nature in restoring to health.

No extravagance or absurdity has been found too great for the adoption of followers or too deep not to secure adherents. In the midst of such obstacles and difficulties, we find our noble calling standing firmly for ages upon the broad platform of truth, urging forward their scientific investigations, without turning to the right or the left, maintaining itself with firm resolution and fixedness of purpose, neglecting no good because it is advocated by charlatans, and advocating no error in subserviency to station, ignorance or prejudice.

Aspersions, detractions and misrepresentations have fallen on its buckler only to rebound in the face of enemies, and to-day the medical profession stands, all the world over, just where it has stood through all civilized time, excepting only in the vast progress made towards substantial improvement, battling for the cause of truth and human advancement. To preserve these high characteristics, and to contribute something to the advancement of medical science, is your privilege and duty.

Unlike many associations among men, the discoveries of the profession are not hidden; no secret remedies are retained; whatever is known to one member is freely communicated to others, and to the world at large, for the full benefit of mankind; and every new discovery in medicine or surgery is proclaimed, that others may investigate for themselves, and determine its value. Such is the uniform practice of our liberal profession. Each member is expected to be well-informed in all new discoveries, and this he can easily accomplish by means of the current medical literature of the day. You are thus compelled to remain students all your lives, and are under obligation to contribute as much as may be in your power to the common stock of learning and information. In this way you will avoid the error of falling into narrow grooves of thought and practice.

In your intercourse with fellow practitioners, regulate your conduct by the loftiest principles of honor and decorum, being guided by such rules as would be suggested to the minds of men of correct habits and honorable character: these may be summed up in that golden rule of "doing unto others as you would be done

by." Envy not the success of others nor sneer at their professional attainments, for to do so marks the jealous and mean mind. Speak not in disparagement of a brother practitioner without a just and sufficient reason, for

"Should such a man, too fond to rule alone,  
Bear, like the Turk, no brother near the throne;  
View him with :cornful yet with jealous eyes  
And hate, for arts that caused himself to rise ;  
Damn with faint praise, assent with civil leer,  
And, without sneering, teach the rest to sneer ;  
Willing to wound, and yet afraid to strike,  
Just hint a fault, and hesitate dislike ;  
Alike reserved to blame as to commend,  
A timorous foe and a suspicious friend."

You have just taken a solemn pledge not to divulge, except in grave necessity, any secret that may be committed to you in your professional capacity. I trust you will have strength and fortitude to keep that promise. Do not, from a desire to please others, or let idle gossip tempt you to reveal such secrets. Many circumstances are known to physicians, told them in confidence or accidentally discovered, which it would be most cruel to divulge.

The physician is often the confidential friend of the family, to whom they go in their difficulties, and there are many troubles and diseases of such a nature that the doctor must know the circumstances bearing on them, the disclosure of which would bring much grief and shame. Seldom is it that such a charge can be brought against our profession; on the other hand, multitudes of families have reason to bless their friend for maintaining inviolable secrets which, if known, would disturb the peace of mind of many good and innocent individuals. That you will maintain the obligations you have this day taken I have no doubt; a sense of honor will guide you, and kindly feelings prompt you to fulfill them faithfully.

In your visits to the sick you will often feel the truth of the following passage, which I quote from Thackeray :—

"It is not only for the sick man, it is for the sick man's friends that the doctor comes. His presence is often as good for them as for the patient, and they long for him yet more eagerly. How we have all watched for him! How we hang upon his words, and what a comfort we get from a smile or two, if he can vouchsafe that sunshine to lighten our darkness! Who hasn't seen the mother prying into his face, to know if there is hope for the sick infant that

cannot speak, and that lies yonder, its little frame battling with fever? Ah, how she looks into his eyes! What thanks if there is light there; what grief and pain if he casts them down, and dare not say—'hope!' Or, it is the house father who is stricken. The terrified wife looks on, while the physician feels his patient's wrist, smothering her agonies, as the children have been called upon to stay their plays and their talk. Over the patient, the wife expectant, the children unconscious, the doctor stands, as if he were Fate, the dispenser of life and death: he *must* let the patient off this time; the woman prays so for this respite!" To the conscientious physician this position is most embarrassing; in his sympathies, hesitating to tell the worst, he is often accused of ignorance or deceit, when, as he alone often knows, his heart has failed him through dread of giving pain. You will often be unjustly blamed, this may be expected, for, as public men, you cannot expect to go through life without detraction. You will often meet with abuse and ingratitude where the reverse might be expected, and, generally, this will come from those who fail to reward you for the toil and anxiety undergone in their behalf. On the other hand you will meet with many worthy persons who will accord you their cheering sympathy. Do your duty fearlessly; let your lives be examples of unostentatious and practical Christianity, and your closing years will exemplify the Psalmist's words: "Mark the perfect man, and behold the upright; for the end of that man is peace."

Finally, in saying farewell, I trust that, as members of this University, you will always maintain a warm affection for your *Alma Mater*, doing as much as lies in your power to extend its usefulness, resenting all aspersions cast upon it, feeling a pride in its prosperity, and, as the years roll on, entering with us in spirit, if not in body, at this our Annual Convocation. Farewell!

#### TO PREVENT BOILS.

A very simple remedy is made known by Dr. Sieven, in a St. Petersburg Journal, for preventing the development of boils. He states that if the skin be superficially scraped with a small knife, so that a drop or two of blood may be pressed through the epidermis so soon as the peculiar stabbing or pricking sensation and slight induration announce the commencement of the boil, it will not be further developed.

# THE CANADA MEDICAL RECORD

## A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D.L.R.C.P., LOND

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MONTREAL, APRIL, 1878.

It will be noticed that we, this month, increase the reading matter of the *Canada Medical Record* by four pages. These four pages we intend to devote to the interests of pharmacists, a very important body in this Province, who up to this time have been entirely without any medium to advocate their interests or protect their rights. The suggestion of the addition of this department to the *Record* was made by one of the leading pharmacists of our city, and we have acted upon it. It is true that the space we have added is not very great, yet little as it is, it involves considerable increase in expense, and we hope that our pharmaceutical friends will come forward and give us their support. It is our intention, if the support given us warrants it, to very soon increase the department to eight pages. We have succeeded in inducing our friend, Dr. Kollmyer, to take editorial charge of it, and in the whole of the Province of Quebec we know of no one better qualified for the task. All letters and articles for this department must be directed to him.

### TO OUR SUBSCRIBERS.

Will subscribers have the kindness to remit the amount due us. We have a heavy payment to make early in May, and the amount of subscriptions outstanding would pay it three times over. Kindly think of us, and show your appreciation of our efforts to furnish you with a *cheap* and good journal by remitting.

### SCRIBNER'S MONTHLY.

This is one of the very best of the American monthlies, its articles being spicy, interesting and beautifully illustrated. No better magazine can be had anywhere. It is published at four dollars a year. We are, however, by a special arrangement with the publisher, enabled to offer it for two dollars a year to our subscribers.

*St. Nicholas* is the name of the very best juvenile magazine published on this continent. It is issued by Scribner & Co., New York, at \$3.00 a year.

We are able to offer it to our subscribers at \$1.50. This offer for both these magazines will soon close. Those who desire them should remit their names and the money to us.

### LACTOPEPTINE.

This is a remedy which we have prescribed during the last four months with a good deal of satisfaction to ourselves and benefit to our patients. It certainly is a very valuable preparation for various forms of indigestion, and is composed of pepsine, pancreatine, diastase, ptyalin, lactic and hydrochloric acid. It is to be had at almost every drug store, and we invite our readers to give it a trial. The advertisement concerning it will be found on our second page, and we direct attention to it.

### PACKER'S PINE TAR SOAP.

We direct the attention of our readers to the advertisement of this soap. It has only recently been introduced to the notice of the profession in Canada, but already, we are informed, a very considerable demand has arisen for it. We have made extensive use of it lately, and have every reason to endorse all the claims which have been put forth for it. Beyond all question, it is exceedingly valuable as an adjuvant in the treatment of various forms of skin diseases, and as such we strongly recommend it.

The Semi-Annual Meeting of the College of Physicians and Surgeons of the Province of Quebec will meet in Montreal on the 8th May.

### TURKISH BATH.

We have, on several occasions, spoken in strong terms of the use of the Turkish Bath, as an agent in the treatment of disease. It is, generally speaking, useful also to the majority of persons, as a means of keeping the body in a clean and healthful condition. In Montreal we have as fine a Turkish Bath as is to be found on this continent, and we think it deserving of every possible encouragement.

### A PHYSICIAN'S BLACK BOOK.

The physicians of Antwerp have established a black book, in which the names of delinquent patients are entered, and by reference to which each practitioner is able to ascertain his probable chances of obtaining remuneration for his services. A similar book is now in process of

being filled up in Montreal, and promises to be of much use.

#### CALLING DENTISTS HARD NAMES.

Dr. Bazin, of Montreal, in an article in the March number of the *Canada Journal of Dental Science*, says, "that dentists are human beings, and, consequently, given to lying, cheating, and many other devices of Satan." Dr. Bazin is a dentist, and should have some idea of the failings belonging to his craft; but we think he has considerably overstepped proper bounds when he attributes this unfortunate condition of things among his confrères simply to the fact of their being human beings. We shudder at the bare idea that dentistry is so bad *because* its practitioners are human. How would he remedy such an unfortunate condition of things he does not say. What would he say to going back a stage or two in development, for future dentists, or might we suggest a Missionary Society for their moral and religious education. It is a terrible condition of things, and in our opinion demands prompt attention at the hands of our philanthropists. Perhaps, however, Dr. Bazin's assertion is a little too sweeping.

#### THREATENED STRIKE AMONG DOCTORS.

There has been some trouble between the public and the medical practitioners in Havre, France, in consequence of which the latter have united, and issued a circular to their patients threatening a general strike unless their terms are complied with. From \$2 to \$4 for night and urgent visits is the moderate sum demanded.

#### PERSONAL.

Dr. Fuller being about to remove to Grand Rapids, Michigan, U.S., has resigned the chair of Anatomy in Bishop's College Faculty of Medicine.

Dr. Trenholme has resigned the chair of Midwifery and Diseases of Women and Children in the Medical Faculty, University of Bishop's College.

Dr. Cassells, formerly of Quebec, has removed to Three Rivers.

Dr. Meek, of Three Rivers, is at present in New-York, working up nervous diseases under Dr. Hammond. After spending a few months in that city he proceeds to Europe to still further pursue his studies

in the same direction. He intends returning in about a year, and will settle in Montreal.

Dr. Drake has resigned his position as one of the Attending Physicians to the Montreal General Hospital.

Dr. Ansell (M.D., Bishop's College, 1878,) sailed for Falmouth, Jamaica, by steamer from New York on the 26th April.

Dr. Prevost, of St. Jerome, is a candidate for the Quebec Legislature in opposition to the Hon. Mr. Chapleau.

Dr. Vineberg (M.D., McGill College, 1878,) and Gold Medallist) has commenced practice in Montreal.

Dr. Blackader, B.A., (M.D., McGill College, 1871) L.R.C.P., London, has been appointed Lecturer on Physical Diagnosis in the Medical Faculty of the University of Bishop's College.

Mr. Reginald Harrison, F.R.C.S., of Liverpool, England, paid Montreal a flying visit about the 19th of April. His stay was brief, but several medical gentlemen had the pleasure of meeting him at a dinner party given by his friend, Dr. Wilkins.

Herbert L. Reddy, B.A., (M.D., C.M., McGill University, 1876,) L.R.C.S., Ed., L.S.A.L., passed the examination before the Royal College of Physicians, London, and obtained the license of the College, 8th April, 1878. We congratulate our young friend upon this additional proof of his professional capacity.

#### UNIVERSITY OF BISHOP'S COLLEGE.

##### FACULTY OF MEDICINE.

##### SEVENTH MEDICAL CONVOCATION.

Notwithstanding a pouring rain, the Synod Hall, Montreal, was well filled on the afternoon of April 11th, on the occasion of the Convocation of the Medical Faculty, of Bishop's College. The Vice-Chancellor, R. W. Heneker, Esq., presided; supported by Dr. David, Dean of the Faculty; Dr. F. W. Campbell, Registrar; and the Reverends Principal Lobley and R. W. Norman, of the Faculties of Arts and Divinity. The following Professors assisted:—Doctors Leprohon, Kollmyer, Kennedy, Wood, Perrigo, Fuller, Edwards, Trenholme, McConnell. Drs. Robillard, Macdonald, Slack, Proudfoot, Latour, Donald Baynes, Armstrong, Hayes and Nelson were also present. A large number of ladies honoured the occasion, and the students turned

out in force. The hall was decorated with scrolls and shields bearing the names of the most distinguished lights of medical science in ancient and modern times. One mourning tablet bore the names of three graduates and one student who have died since the graduating class of to-day commenced its studies.

After an opening address by the Vice-Chancellor, the Dean of the Faculty made the Annual Announcement for the session of 1877-78, as follows:—

The session terminated on the 29th March, having opened on the 1st of October, thus a full course of six months lectures were given. The number of students in attendance during the session was 43; of these there were from the Province of Quebec, 32; Ontario, 4; United States, 5; Jamaica, West Indies, 1; Bermuda, West Indies, 1; total, 43. Throughout the whole session the attendance at all the classes was remarkably steady. The latter month was, however, clouded by the very sudden death of Mr. John J. Cauley, of Norwich, Connecticut. This young gentleman began his medical studies at this University, and it is but meet for me, here, to-day, to say, that judging from the position he took in the primary examinations last year, had he been spared, he would to-day have occupied a prominent position among the graduating class. To him had been allotted by his fellow-students the position of valedictorian. The terrible suddenness with which the summons came made it all the more sad, added to which is the fact that he was the only son of an aged widowed mother.

The Hon. Dr. Paquet, of Berthier, and Dr. Gibson of Dunham, the assessors or censors appointed by the College of Physicians and Surgeons of the Province of Quebec, to attend the examinations of this Faculty (this being a feature of the new Medical Act) were present during four of the examination days. This was the first time that this clause of the recent Medical Act was put into operation. Your Faculty was much pleased to note the gentlemanly and yet very thorough manner in which the assessors performed their work, and are happy to be able to state that previous to their departure they expressed themselves as being in the highest degree satisfied with the manner in which everything connected with the examinations was conducted.

The following gentlemen passed their examinations as follows. All are given in order of merit:—

*Botany.*—George Goldsworthy Gale, Quebec; David W. Houston, Belleville, O.; Robert H. Wilson, Montreal; Francis J. E. Tetrault, St. Pie, Q.; Elzéar Sabourin, Embrun, O.; Adolphus Lalonde, St. Cunegonde, Q.; J. W. McDuffie, Stanstead; A. Ansell, Falmouth, Jamaica.

*Practical Chemistry.*—Jas. Leslie Foley, Montreal, full marks, honorable mention and special prize; Geo. Goldsworthy Gale, Quebec; Mark Kannon, Montreal; Walter de Moulpied, Montreal; Elzéar Sabourin, Embrun, O.; Aaron Ansell, Falmouth, Jamaica; George Gernon, St. Benoit, Q.; John Sheridan, Montreal.

*Theoretical Chemistry.*—James Leslie Foley, Montreal; Walter de Moulpied, Montreal. *Primary examination for the degree* (Chemistry, Anatomy, Physiology and *Materia Medica*) D. Gaherty, Montreal, prize; George W. Nelson, Montreal; Charles R. D. Comeau, River David; George Oliver Gernon, St. Benoit; Charles Black, Mount Forest, O.; Elzéar Sabourin, Embrun, O.; Aaron Ansell, Falmouth, Jamaica; Rodolphe E. Leprohon, Montreal; John Sheridan, Montreal; J. W. McDuffie, Stanstead, Q.

Mr. George G. Gale, of Quebec, passed on Chemistry, Anatomy and Physiology. He was not qualified to present for *Materia Medica*, which he will take next year.

The final examination for the degree of C.M., M.D. This examination consists of the following branches: Theory and Practice of Medicine, Theory and Practice of Surgery, Obstetrics and Diseases of Women and Children, Medical Jurisprudence, Clinical Medicine, Clinical Surgery, Pathology and Hygiene, has been passed by the following gentlemen, whom it will be my pleasant duty to present to you for graduation. They are mentioned in the order of merit:—Homer Elihu Mitchell, of Bedford, Q., "Wood" Gold Medallist; Wm. Young, Montreal, prize; Aaron Ansell, Falmouth, Jamaica, W.I.; John W. McDuffie, Stanstead, Q.; Elzéar Sabourin, St. Urbain, Q.; Charles Raphael Belle, Montreal; John Sheridan, Montreal; Joseph Wm. Dugald MacDonald, Nicolet, Q.; Anthony Kerry, Montreal; Herbert Cooper Fuller, Grand Rapids, Mich.

The Wood Gold Medal, founded by Dr. Wood, of Ottawa, was awarded to Homer Elihu Mitchell, of Bedford, Q.

The prize for the best Final Examination was awarded to William Young, of Montreal, Q.

The prize for the best examination in the Primary Branches falls to Denis Gaherty, of Montreal, Q.

A special prize, for Efficiency in Practical Chemistry, has been awarded James Leslie Foley, Montreal, Q.

The Senior Dissector's prize has been gained by Rodolphe E. Leprohon, of Montreal, Q., whilst Henry B. Chandler, of Bermuda, W.I., and James Leslie Foley, Montreal, receive honorable mention.

The Junior Dissector's prize goes to Francis Joseph Tetrault, of St. Pie, Q., and David W. Houston, of Belleville, O., and Adolphus F. Lalonde, of St. Cunegonde, Q., receive honorable mention.



The *Ad eundem* degree of M.D. was then conferred upon Professor McConnell (M.D. McGill), after which the oath of allegiance was administered by the Vice-Chancellor to those members of the graduating class, British subjects only, who had not yet taken it. After the oath had been administered, the Vice-Chancellor requested that, after the time-honored custom of the College, the audience should join in singing "God Save the Queen." This was done with a hearty good will.

The Medical Oath was then administered in Latin by the Registrar, Dr. F. W. Campbell, and the degree conferred upon each of the gentlemen whose names are mentioned above.

Dr. William Young then, on behalf of the graduating class, delivered a most interesting valedictory, and was followed by Dr. Kennedy, who addressed the graduates on behalf of the Faculty.

Sir Francis Hincks, Principal Lobley and the Rev. R. W. Norman also addressed the meeting, which terminated shortly after six o'clock.

The Medical Convocations of Bishop's University are in future to be held in Montreal, and the Faculty have every reason to be proud of the success of their first one in the city. Had the weather been fine the Synod Hall would have been filled to overflowing.

#### OBITUARY.

##### JOHN BELL, M.A., M.D.

An almost extraordinary fatality seems to have fallen upon our Montreal physicians, for, during the last ten months, death has taken from among us no less than seven members of the profession. No age has been exempt—for the summons has come to those in middle life, to those well advanced in years, and we now have to chronicle the death of one who was in the very flower of his youth. Dr. John Bell was an enthusiast in his profession, which he loved for its own sake, and being possessed of indomitable energy and perseverance, he had, several years previous to his death, attained a position among his confrères which gave every promise of a thoroughly successful professional career. He was a clear observer, and possessed of considerable originality, which he often, in practice, turned to practical account. He contributed, occasionally, to the Montreal Medical Press, and we believe every volume of the *Record* has numbered him amongst its contributors. His last published paper was a successful case of tracheotomy, for diphtheria. This was published in full in the *Canada Medical and Surgical Journal*, for February. Our issue of the same month

contained an abstract of it, written by him. In the Montreal Dispensary, for six or seven years past, he occupied the position of Attending Physician, and did good service to the poor at this deserving charity. He was likewise, from its foundation, one of the medical staff of the Protestant Infants' Home. He also acted for two years as secretary to the Medico-Chirurgical Society of Montreal, with much acceptability to its members, and, from its reorganization, was one of its active working members. Dr. Bell was an enthusiastic botanist, and we are sure his presence will be much missed at the annual botanical excursions of the Natural History Society of Montreal, where his genial smile and botanical enthusiasm made him a pleasant leader. He was an M.A. of Queen's College, Kingston, but received his M.D. from McGill College in 1866. Previous to entering upon practice, he served about three years as Assistant House Surgeon to the Montreal General Hospital. He was surgeon of the Montreal Brigade of Garrison Artillery, and during the Fenian raid of 1870, he served with his Regiment at the skirmish at Trout River. His death was somewhat sudden, and sad in its nature. He was called to Dundas, to attend the funeral of a relation, and after a most fatiguing day's work, he took train for Toronto, on Thursday, March 21st. Before reaching Toronto, he was decidedly ill, but after a brief rest he pushed on to Hamilton, but further he was unable to go. Pneumonia soon showed itself, and the disease attacking both lungs, complicated by somewhat old mitral disease, it soon became evident that his case was a most serious one. Youth was in his favor, and his medical attendants, Drs. Malloch and Macdonald, hoped for the best; but, in spite of all, death closed the scene in Hamilton on Friday. His body was removed to Montreal, and on Monday, April 1st, it was conveyed to Mount Royal Cemetery, the funeral procession being of very great length, and embracing every rank and condition in society. Dr. Bell was unmarried, but leaves an aged mother, also a sister and a brother, to whom we extend our deep sympathies. Our personal relations with Dr. Bell were always of the most pleasant character, and we mourn his loss, for he was a warm personal friend. Truly, in the midst of life we are in death.

#### BIRTH.

In Montreal, on the 23rd instant, the wife of G. F. Slack, M.D., of a son.

## Pharmaceutical Department.

A. H. KOLLMYER, M.A., M.D., Editor.

It is a remarkable feature connected with the literature of the Province of Quebec, that there is no medium in journalism, with the exception of the ordinary daily press, by which the pharmacist can make known his researches and discoveries, or from which he can glean information on subjects connected with his special calling. That this condition of affairs should have existed so long, without any effort having been made before to rectify it, seems almost incredible, especially when we take into consideration the well-known energy and enterprise of the pharmacists of this Province, which is most assuredly second to none in the Dominion, with this one exception. To alter this condition of affairs it has been proposed to devote a certain portion of the *Canada Medical Record* to the interests and uses of pharmacists; which portion can be afterwards increased according to the demand for space, while at the same time the journal can be used as an advertising medium. The enlargement, however, is not made at the expense of the medical department of the journal, which remains as heretofore, but by printing four additional pages, and as circumstances show that our efforts are being appreciated, the space will be increased; in fact, we will give four pages additional matter, so that our old subscribers will not be deprived of their usual amount of medical news. The success of this innovation will in a great measure depend upon the support and assistance furnished by the pharmacists themselves. Therefore, the co-operation of all interested in the welfare and advancement of pharmacy is respectfully solicited. By this means it is hoped that a channel will be opened up by which free communication can be established, not only between druggists themselves with mutual advantage, but also between them and the members of the medical profession, whereby the latest discoveries, improvements and inventions may become more generally known, and the public at large will then more readily experience the benefit of their united researches.

*Editor's Notice.*—All communications and correspondence connected with the *Pharmaceutical Department* of this journal should be directed to A. H. Kollmyer, M.D., Box 936 P. O., Montreal.

A column will be devoted to Queries, etc., and we shall endeavor to furnish answers to the best of our ability; but in all such cases we must insist upon the name and address of the writer.

Exchanges with other Pharmaceutical and Chemical journals are respectfully solicited.

### NOTES ON DISPENSING.

BY H. R. GRAY.

Too much attention cannot be given to this important branch of practical pharmacy, and its most minute details should in every case be scrupulously and intelligently attended to. It is just possible that all this care may not make the medicine any more efficient than were the musty infusions and decoctions supplied so liberally to our forefathers from the old-fashioned doctor's surgery, but the care displayed in bottling, labelling and wrapping, gives confidence to the patient, and is indirectly a pretty correct indication of the quality of the medicine itself.

The pharmacist should, in every case, copy the prescription into a book, kept for that purpose, called a prescription book, and he will find it a great aid to correct dispensing, if this is done prior to making up the medicine, as it will enable him to study and check the prescription without exciting the alarm of a nervous patient.

Some pharmacists paste the prescription into the prescription book and number it, but there are so many objections to this course, that I am quite sure a short trial of the copying system will lead to its immediate adoption. In case of accident the copy of the original prescription on the register will be the best proof he can offer that he has *correctly read* it. The original should, of course, always be retained when possible, and at the close of each week they should be carefully folded, the name of the presenter, with date, written on the back, and put away in a box kept for the purpose, as is the case with invoices. With regard to the proprietorship in the prescription, this is a vexed question. My own opinion is, that it belongs to the patient. However, as so few people make any objection to the pharmacist retaining the prescription, it is always best to do so, and to furnish a copy when asked for. In England, it is customary to return the prescription in every case. In the United States it is usual to retain it. When the patient particularly requests to have his original prescription, it is best to give it to him and retain a copy, taking the precaution to number and price it, and stamp it with a small embossing stamp. Some physicians raise an objection to the repetition of prescriptions without the patient returning to them; but a little reflection will show that the pharmacist is powerless in the matter. No pharmacist should repeat a prescription containing an exceptionally dangerous drug without advising the patient to obtain from the physician a renewal of the order. So many prescriptions are given in chronic cases with instructions to take three or four bottles before returning to the physician, that it is an utter

impossibility for the pharmacist to take upon himself to refuse medicine to a patient. Then, again, a favorite mixture will sometimes be handed about from one family to another, and the well-thumbed prescription be made up in several different pharmacies. Physicians are sometimes very much annoyed at this, but it is evident the pharmacist is not to blame, as he can hardly dictate to a customer who presents the prescription. Besides, the celebrity of the prescription is a kind of walking advertisement for the doctor who wrote it, and is adding to his reputation daily, by introducing his name most effectually into the preserves of other medical men.

It has been said that tact is worth more to a man than money. It is assuredly a great aid to a dispenser. The questions put to him by the patient, and the surveillance to which he is subjected, should never put him off his guard. With the utmost politeness he should observe the greatest reserve, and should never, on any account, make a remark which might be construed into a depreciation of the medicine ordered, or of the physician who prescribed it. His position should be as between patient and physician entirely neutral. It will very frequently happen with druggists of standing that his customers will apply to him for advice in the selection of a physician. In this case he is bound to give his advice conscientiously and with no reference whatever to the little differences which frequently exist between pharmacists and physicians, although it is not at all likely that a pharmacist can be so disinterested as to recommend a physician who is antagonistic to him.

It should be properly understood that one of the principal duties of the accomplished dispenser is to check the doses ordered, and this his education in posology eminently fits him for. If an error is observed, he should at once send a messenger to the prescriber to ask a revision of the prescription, meantime suggesting to the patient that he will forward the medicine as soon as prepared. By his manner he should keep from the patient all knowledge of the error, and his natural tact will here be of the greatest assistance to him. The prescriber, in order to prevent unnecessary delay, should in all cases, when ordering an extraordinary or heroic dose, initial the line, so that the dispenser would have no doubt or hesitation in making up the prescription. Many slight errors may be at once corrected by the dispenser, without referring back to the prescriber, as, for instance, the ordering an ounce for a drachm, or a drachm for a grain, etc.

The question of prices is another important matter, and speaking with experience, I do not believe a dispensing house can quicker ruin its reputation for tone, ability and good drugs, than to charge what are known as low prices. On

this subject I will quote the following from *Parrish's Practical Pharmacy*:

"Many answers to comments on his prices will suggest themselves to the ingenious salesman, but to make these conclusive he must show by the precision and judgment with which he conducts his business, and by the neatness and exactness which he brings to bear on every little package he sends out, that he regards his vocation not as a common trade, merely to buy and sell and get gain, but that as a man of science and a careful conservator of the interests of his customer, as well as his own, he amply earns all the pecuniary advantages which his business is supposed to bring."

#### PHARMACEUTIC NOTES.

By H. R. GRAY.

**EXCIPIENT FOR PILLS.**—A most excellent excipient for making pill masses is the following: Take 2 drachms of powdered gum tragacanth and rub it up in a mortar with 6 drachms of glycerine (by measure). Turn into a covered pot and keep on the dispensing counter for general use. It is semi-fluid at first, but shortly forms a soft tenacious mass. As gum tragacanth varies, it may sometimes be necessary to use 1 fluid ounce of glycerine. Twenty-four grains of quinine sulph. require only ten grains to make a mass. One drachm of potassi. bromidi only requires 6 grains, easily rolled out. Pills made thus will not become hard. In using excipients for pills ordered by prescription, the weight of the excipient used should invariably be noted down in the prescription book to secure uniformity of size when a fresh box of pills is ordered.

**APOMORPHIA.**—Prescribers should be careful to indicate which preparation of apomorphia they require. The amorphous, which is a greyish powder, should never be used, as it varies greatly in strength. The most reliable salt of apomorphia is the *muriate in crystals*. It is of uniform strength, very soluble, and is double the price of the amorphous. Dose  $\frac{1}{16}$  to  $\frac{1}{4}$  grain as an emetic.

**CHRYSOPHANIC ACID**, which has recently been recommended in a London contemporary, is the chief constituent of the colouring matter of rhubarb, goa powder, waterdock and other plants. Its chemical formula is probably  $C_{10}H_8O_3$ . It has been variously called rheic acid, rhubarbic acid, rumicin, etc. It is met with in pharmacies in the form of a bright yellow powder, soluble in ether, alcohol and benzol, and only slightly in water. It is exceedingly stable, and may be brought to a very high temperature without change. Some samples have more odour than others. It is crystallizable, and derives its name from its golden shining crystals. It has been used with apparent success in certain skin diseases, in the form of ointment, but whether it will be more than a nine days wonder remains to be seen. Goa powder, which contains a large percentage

of the acid, has long been in high repute in India, in skin affections.

**CROTON CHLORAL HYDRATE** is now very seldom prescribed in Montreal. When it was first introduced to the medical profession by Leibreich, a fair trial was given to it. The small quantity now used in our dispensing houses would seem to indicate that it has not come up to the therapeutic value at first attached to it.

**MONOBROMATED CAMPHOR**, made into pills with extract of gentian, has proved a very valuable remedy in the hands of some prescribers here, while others seem to place no value upon it, and have already allowed it to fall into disuse. It has a well-deserved reputation in the United States, in certain forms of hysteria, nervous headache, St Vitus dance, etc. It is usually prescribed in doses of one grain every three hours, increased if necessary to two grains. It is a most beautiful chemical when well prepared. Its long needle-like crystals attracted great attention at a late pharmaceutical conference in England.

**JABORANDI.** *Pilocarpus Pinnatus* is a drug which invites further study. After the researches of Dr. Ringer and Mr. Martindale, an English pharmacist, there can be no doubt of the powerful diaphoretic and sialogogue properties possessed by it. The secret of its mighty diaphoretic and sialogogue strength undoubtedly exists in its alkaloid recently discovered by Mr. Gerard, and the most efficient salt of this alkaloid is generally believed to be the nitrate; its price, however, effectually excludes it at present from general use. The price asked for it in New York is about \$25 per drachm, but as better and easier methods of eliminating it are discovered, the price will correspondingly decline. Half a grain of the nitrate is said to produce the effect of a full dose of jaborandi. One drop of the solution of the nitrate (1 grain to 1 ounce) put into the eye will contract the pupil to the size of a pin's head. From a report of some interesting physiological experiments performed on a dog and a rabbit at University College, London,  $\frac{1}{10}$  of a grain of the alkaloid produced profuse salivation, which was readily checked by administering  $\frac{1}{10}$  of a grain of sulphate of atropine. Mr. Gerard thinks that the best pharmaceutical preparation is the fluid extract. In this city jaborandi has been used with success in one drachm doses, infused in a cup of boiling water, and the whole drank (without being strained.) In a short while it produced an excessive flow of saliva followed by profuse diaphoresis. No nausea followed in the two cases reported by the physician for whom the writer prepared the remedy.

Jaborandi is found in pharmacies, in the form of leaf, fluid extract, and in gelatine coated pills of the solid extract. For subcutaneous injection, the muriate or nitrate of the alkaloid will doubtless be eventually employed. It is needless to say that the hypodermic syringe must be scrupulously cleansed after using it for the purpose. The dose hypodermically is stated by Reichardt to be  $\frac{1}{2}$  of a grain. The contradictory accounts at first published in

Paris and London of the effects produced by this drug were undoubtedly owing to the different varieties of jaborandi (and in one case a totally distinct plant) shipped from different points of South America. It is believed that the drug at present shipped to the United States and Europe is the kind originally taken to Paris by its originator, Dr. Continho. The genuine grows in the North of Brazil, near Pernambuco, and is a beautiful shrub, 8 or 10 feet high. The essential oil of the leaves, which is very abundant, has not yet been experimented upon.

**CHLORAL HYDRATE.**—The writer of these notes saw a large bottle of chloral hydrate in flat cakes being wrapped for shipment to a western pharmacist a few days since. One would scarcely suppose it necessary to inform a licentiate of pharmacy that chloral hydrate should never be dispensed in this form. No man for the sake of a little extra profit should be guilty of such a gross act of injustice to the prescriber, as to use a chemical so little to be relied upon. In cakes chloral hydrate is of unknown and very variable strength, and almost always of very doubtful purity. The British Pharmacopœia orders it to be crystallized, and no dispenser in the British Empire should use it otherwise. There can be no doubt that the great want of confidence shewn by some physicians, even now, in this valuable remedy, is owing in a great measure to very inferior qualities hitherto in the market.

At the same time unlooked for results may be expected if such absurd combinations, as chloral hydrate, bromide of potassium, tincture of belladonna and tincture of nux vomica, are ordered in the same prescription, as the writer has seen more than once. Such reckless prescribing is scarcely the correct way of developing the known valuable therapeutic effects of chloral hydrate. Chloral hydrate when mixed with powdered camphor changes into a transparent fluid of a syrupy consistence resembling glycerine, very much used as an application for toothache and for applying along the course of the nerve in facial neuralgia.

**THE COLLEGE OF MEDICINE** at Newcastle-on-Tyne, England, some time since, at the solicitation of Messrs. Proctor, Brady and other members of the Pharmaceutical Society of Great Britain, opened its doors to pharmaceutical students, and the lectures on *Materia Medica*, *Chemistry* and *Botany* were arranged to be given at such hours that the students could attend them, without interfering with their customary duties in the pharmacies of the town.

**THE MONTREAL COLLEGE OF PHARMACY** closed its Lecture Session at the end of March, and the examinations took place on Thursday and Friday, the 25th and 26th of April. The students of Pharmacy in Quebec attend the lectures at Laval University. The date of the examinations there has not yet been decided upon. A peculiar feature about the working of the Pharmaceutical Association of the Province of Quebec, which is the only body authorized by Act of Parliament to examine and license candidates,

for registration as licentiates in Pharmacy, is, that the lecturers are not the examiners of the students, but a totally distinct Board of Examiners is elected annually by the Council of the Association. The examinations are both written and oral, and include practical dispensing at the counter.

**COLORLESS TINCTURE OF IODINE.**—A mixture of tincture of iodine and carbolic acid will gradually produce tri-iodophenol, which is soluble in the alcohol. Hence the disappearance of color. The ingredients generally used are: *R.* Tinct. iodinii comp. *m* xlv.; acid. carbolic, *m* vj.; glycerine fl.  $\frac{3}{4}$  i.; aquæ fl.  $\frac{3}{4}$  v.; *M.* This is sometimes yecept carbolate of iodine. The color disappears in from eight hours to ten days.—*New Remedies.*

**PARIS GREEN**, also called Schweinfurth Green, was first made in 1814, in Schweinfurth, Bavaria, by adding a solution of arsenious acid to verdigris or acetate of copper. According to Erdmann, its composition generally is arsenious acid 59 parts, cupric oxid 31 parts, acetic acid 10 parts, which corresponds to the formula  $\text{Cu Q C}_2 \text{H}_3 \text{O}_2 + 3 \text{Cu H As O}_3$ , being a mixture of acetate and arsenite of copper. The proper antidote is the same as in all cases of arsenical poisoning.—*New Remedies.*

**CAPSICUM AND PRICKLY ASH BARK.**—Mr. Willis, of Chester, recommends capsicum in 30 grain doses, every hour, in delirium tremens, and states that he has used it with unvarying success for twelve years; this agrees well with the known effect of prickly ash bark (*Xanthoxylon fraxineum*) which has a similar action, and *allays the thirst for drink.*—*London Phar. Journal.*

**INTERESTING TO SMOKERS.**—An eminent Parisian oculist describes a form of blindness which results from the use of tobacco; the affection, he asserts, is very common. The blindness referred to seems to differ from that resulting from the excessive use of alcohol, in the fact that the pupil of the eye is contracted.—*London Pharm. Journal.*

**NEURINE.**—A paper in the *Pharmaceutische Centralblatt*, on neurine, a base which has recently been used for diphtheria, gives two processes for its preparation, one from bile, and the other from yolk of egg, as well as tests for its purity.

**DIALYSED IRON.**—Some samples of this new preparation examined by Mr. H. Trimble, and purchased in Philadelphia as five per cent. solutions of ferric oxychloride, showed a variation from 2.514 to 4.831 per cent., not one out of six samples contained the guaranteed percentage. Doubtless it is not an easy matter to obtain a solution of dialyzed iron of definite strength, but it evidently behoves pharmacists to examine the strength of this preparation which is so rapidly coming into favor.

**SYRUP OF BROMIDE OF ZINC.**—(R. G., Toledo, Ohio.) This is a preparation recommended in epilepsy, and consists of zinc brom.  $\frac{3}{4}$  j. syr. simplicis  $\frac{3}{4}$  iv.—Mix; of which the dose is ten drops three times daily, gradually increased, if necessary, to fifty, sixty, or even more in some cases.

**COLOGNE.**—The following formula is recommended by Dr. Askinson: oil of bergamot, 7 parts; oil of lemon, 17 parts; oil of neroli (pétale), 10 parts; oil of neroli, bigarade, 3.5 parts; oil of rosemary (Eperlé), 7 parts; deodorized alcohol (94 percent.), 2,460 parts; all by weight. The oils must be perfectly pure and fresh, and the mixture must be allowed to stand until it is fully "ripe." One-eighth of it is then taken out, enough distilled water is added to the larger portion to just produce cloudiness, and then the reserved portion added, which will restore the transparency. If it requires filtering, this should be done by means of magnesia or French chalk. Age improves the flavour.

**VIOLET WRITING AND COPYING INK.**—Mix 1 drachm of Hofmann's Violet (Trimethyl-(or ethyl-) rosaniline) with  $\frac{1}{2}$  oz. of alcohol in a glass or porcelain vessel, and let stand for three hours. Then add 13 oz. of distilled water, and heat gently until all the alcohol is expelled. Having made up the bulk to 13 oz. with water, add 4 drachms of gum arabic dissolved in 13 oz. of water.—For copying ink add 2 drachms of glycerine to every pint of the ink.—The soft aniline paste, which you say you have on hand, may be dried by spreading it on a plate of glass and exposing to a warm temperature.

**HAIR-RESTORATIVE.**—Prof. Erasmus Wilson recommends the following lotion:

Liquor ammonia,  
Ol. amygdal. dule.,  
Chlorofomi ..... aa 1 fl.oz  
Spiritus rosmarina..... 5 fl. oz  
Ol. Limonis..... gtt. x

The scalp is to be well cleansed with a stiff brush before applying the lotion, which should be diluted if it should be found too strong.

**EMPLASTRUM PICAS LIQUIDÆ.**—Tar, 2 parts; Resin, 2 parts; Pitch, 1 part. Melt the resin and pitch together, remove from the fire, add the tar and stir rapidly. Spread on chamois or cloth, when it cools to the consistence of honey. Two-fifths of this is the remedial agent: it is adhesive and elegant. (Dr. F. Marion Murray in *Am. Journ. Pharm.*)

#### A NEW MUCILAGE.

The *Journal de Pharmacie* states that if, to a solution of gumarabic, measuring  $8\frac{1}{2}$  fluid ounces, a solution of 30 grains of sulphate of aluminum, dissolved in two-thirds of an ounce of water, be added, a very strong mucilage is formed, capable of fastening wood together, or of mending porcelain or glass.



## Original Communications.

### Membranous Croup. — Tracheotomy. — Recovery.

BY WOLFRED NELSON, C.M., M.D., Member of the College of Physicians and Surgeons, Province of Quebec; late Assistant Demonstrator of Anatomy, Medical Faculty University of Bishop's College, Montreal; Physician Accoucheur to the Female Home; Attending Physician to the Montreal Dispensary. Read before the Medico-Chirurgical Society of Montreal, on the 3rd of May, 1878.

On Saturday, December 15th, 1877, saw patient, a little boy, aged two and a half years, for the first time. He is a well-nourished little fellow, very active and sharp. He was up and dressed. Breathing harsh; voice rough. Examined throat carefully, found tonsils enlarged; a number of small ulcers were to be seen on the right tonsil. Fauces and surroundings presented nothing abnormal to the eye. No fetor from breath. Face slightly flushed. Bowels have been regular. He has slept fairly. Ordered the following:

R Potass. chlor..... ʒ ss.  
Syr. simp. .... ʒ i.  
Aq. ad..... ʒ viij.  
M. ft. gargarisma.

Sig. The gargle.

A teaspoonful to a wineglass of water, and use as a gargle every hour.

Ordered slop diet. Saturday evening he was not so well. Ordered vin. ipecac. and a hot bath, as the child was decidedly croupy; no result followed. Repeated bath, and ordered mx of vin ipecac., which gave ease, the ipecac. to be repeated every two hours.

Sunday, Dec. 16th.—Made a single visit, found him somewhat better.

Monday, Dec. 17th.—Child the same. No anxiety of face. The repeated doses of vin. ipecac. act well.

Tuesday, Dec. 18th.—At morning visit found child worse. Breathing labored; pulse rapid; cheeks flushed. Had passed a very restless night. Will not allow throat to be examined.

Tuesday afternoon.—Child slightly better. He was sleeping during my second visit. Child's father came over at night, and said that he was worse. Used a gargle of liq. ferri, perch. and aq., as well as that first ordered. Pulse, 140; resp. 45.

Wednesday, Dec. 19th.—Was called up at 5.30 a.m. Patient was markedly worse. He had been very ill from 1 a.m. Constant tossing about. High

fever. Gave ten grains of calomel. Applied a solution of nitric acid, 1 to 20, to the throat, had a great deal of trouble in doing so; but succeeded fully. The child quieted down and went to sleep. Face flushed. Bowels moved at 5.45. Left at 6. Returned at 9: no change for the better. Dr. Reddy met me in consultation at 10.45. Had child removed to a room in the basement, where water was evaporated freely, filling the room with moisture. At 4.30 p.m. Dr. Reddy again met me. Child as before. We met at 6 p.m., when the child was worse. At 7 made another visit, when matters were very grave. During the day we had advised tracheotomy as a *dernier resort*. Dr. Reddy having agreed with me in my diagnosis of membranous croup. The child's parents consented. At this visit a powerful emetic, suggested by Dr. Reddy, of hydrarg. sulph. flova, was tried; it was followed by the vomiting of a small quantity of thick ropy mucus. At 7.30, as the child was worse, I sent for Drs. Reddy and Hayes for the operation. On their arrival the child's nails and lips were blue, and he was evidently sinking fast. Face pallid and cold. Child unconscious. All of the muscles of extraordinary respiration in play. Great sub-sternal depression on expiration. All being ready, the child was placed on a table, when, assisted by Drs. Reddy, Hayes and Mr. G. W. Nelson, operation commenced, Dr. Reddy administering the chloroform. A lamp was placed near the child's head to afford me a good light. The chloroform acted admirably. My outline incision was an inch and a half long, and then was enlarged on a director, thoroughly dividing the integument; fasciæ superficial and deep, were taken up and divided, layer by layer, on a director. The trachea was deeply placed. It was soon reached. Cut no vessels of any importance; there was scarcely any hemorrhage. The trachea was successfully hooked after a second attempt, and divided from below upwards with care. The child was sinking rapidly, some difficulty was experienced in introducing the tracheotomy tube, it having slipped into a small pouch to the right of the trachea. This was soon corrected, and the tube properly introduced; however, it would not work. The air rushing in and out of the wound around the sides of the tube, could be heard all over the room; the tube was choked with mucus. Here Dr. Reddy, with great courage, cleared the tube with his mouth, it was placed in situ. Pulse failing. For a few moments we all thought the child dead, as no respiration could be detected; nearly pulseless. He was turned on his side, and gently patted on the back.

After a pause two convulsive attempts at breathing were made, when respiration again ceased, as far as we could judge. The tube was cleared with a feather; then the chest walls commenced to rise and fall very gently. Pulse a shade better. A stethoscope was placed over the heart, its sounds were weak but regular. The tube had to be cleared repeatedly. We had to sit him up to do this, when he was again laid down. Respiration became regular but weak. Face has lost its deadly ashen hue. Effects of chloroform passed off—about 3 ij were used. In about twenty minutes the child opened his eyes; lips pink; he partially turned; applied a sponge, moistened with hot water, to orifice of tube. Respiration now became full and regular. Pulse firm and full. Face natural. Lividity of nails is disappearing. Operated at 8.20; everything was completed by 8.31.

9.30 p.m.—Pulse 90, full and regular. Patient wanted milk, when a small cup in teaspoonfuls was taken without any difficulty. He slept half an hour quietly, then awoke and was a little restless, quieted down and again went to sleep. 11.20 p.m.—Respiration, 24; pulse, 94.

Thursday, Dec. 20th, 1.15 a.m., pulse 90. 3.30 a.m.—Removed central tube, it having become choked. A number of pieces of very tenacious membrane came through outer tube; the secretion on inner side of centre tube is very difficult to remove. He drank a cup of milk with lime water. Pulse, 84; resp. 30. A good deal of mucus coming away. Moisture on sponge was continued all night at intervals of a few minutes. 4 a.m.—Awake and perfectly conscious; wants more milk, none was given. Placed a light match over mouth and nostrils, the flame was not disturbed, there being no exit of air from either. Bronchitic râles were got over both lungs. Keep room moist by evaporation as before. 4.30 a.m.—Child stood up, wide awake; got up again at 4.50, and urinated; he is perfectly easy. 6.30.—Had motion from bowels. Respiration harsher. He took a cup of milk and lime water, holding it himself. 8.30 a.m.—Centre tube nearly full; distressing symptoms set in, they at once disappeared on putting in a clear tube; he eagerly drank a quantity of milk. He breathes quietly through tube. Patient looks very well. 10 a.m.—Patient sleeping lightly; respiration, 30; pulse, 80; washed edges of wound, they look healthy; no evidence of any membrane; pulse accelerated and not so full. Face natural; lips pink; no cyanotic symptoms. Took half a cup of milk and lime water, and swallowed

without any difficulty. He slept nearly twenty-five minutes. Had a greenish motion from bowels. 11 p.m.—Pulse 135, intermitting. Now gave him small pieces of ice, it was gratefully received. 11.30 a.m.—Got up pledgets of phlegm and membrane; breathing again became easier. 11.45 a.m.—Sleeping soundly. Slept for fifteen minutes only. Temperature of room kept at 75°. 12 noon.—Gave half a cup of milk and lime water. He laid down. 1.45 p.m.—Has slept twenty-five minutes. Ice gives great ease. Slept at intervals until 2.15. 2.30 p.m.—Took milk; symptoms of choking set in at intervals. Pieces of membrane came away on using a feather. Doing well. Face slightly flushed. Resp., 30; pulse, 140. 3.45 p.m.—Gave a wineglassful of milk. 5.30 p.m.—Evaporating two quarts of water an hour. Had a fair motion from bowels. 6 p.m.—Pulse, 116; temp. of body, 101°; temp. of room, 84°; best sleep since illness; still sleeping soundly. 3.55 p.m.—Awake for ten minutes; cleared tube; pulse, 95; resp., 30. Face clear; thick mucus from tube; some moisture on lips. Temp. of room, 80°. He is always better when there is a great deal of moisture in the room. He sits up in bed and plays with toys. Had half a cup of milk. 4 p.m.—Got up a quantity of thick mucus and shreds. We are now evaporating three quarts of water an hour; size of room, about 17 by 17 ft. 5.15 p.m.—Removed tube and got a large piece of membrane. Temp. of room, 81°. 6 p.m.—Temp. of body, 101 $\frac{2}{10}$ °. Had half a cup of milk. Temp. of room, 83°. 6.20 p.m.—Temp. of room, 85°. A long shred of membrane came away. Had another small motion from bowels. 9 p.m.—Patient has slept two hours. 11.30 p.m.—Took half a cup of milk and went to sleep.

Friday, Dec. 21st, 3 a.m.—Cleaned tube; gave half a cup of milk and lime water. Patient has slept the greater part of the night. Temp. of room, 83°. Face natural. 6 a.m.—Gave another half cup of milk and lime water. Respiration tranquil and noiseless. Pulse 78°; resp. 25; temp. of body, 99 $\frac{5}{10}$ °. Temp. of room, 83°. 8 a.m.—Child up and drawing; some blood and mucus came away. Still evaporating the same quantity of water. Mucus running from nose. 10.55 a.m.—Temp. of room, 80°. 11.20 a.m.—Gave half a cup of milk. 12 noon.—Evaporating six quarts of water an hour. Gave half a cup of milk. 1.30 p.m.—Tube nearly full; bloody mucus comes away. Now remove exudation matter on tubes easily by dropping them in boiling water for a moment, which coagulates it. 2.30 p.m.—Tube filled with mucus and blood. No

signs of pulmonary trouble of any kind. Clean mucus running from nose, and also from below wound in the throat. Tongue furred, edges clean. During the last two days there has been considerable moisture in the mouth. 5.30 p.m.—Temp. of room,  $82\frac{1}{2}^{\circ}$ .—Child up cutting paper. 6 p.m.—Urines freely. 7.30 p.m.—Temp. of room,  $82\frac{1}{2}^{\circ}$ , clouds of steam at times. Child sleeps quietly. A muco-pus of a straw color is now found between main and inner tube on removal. 8 p.m.—Had another motion from bowels. 10 p.m.—Cleaned tube; pulse,  $80^{\circ}$ ; resp., 28. Pulse intermits at ninth, eleventh, and fourteenth beats. Flow of mucus from nose continues and under tube. Gave half a cup of milk.

Saturday, Dec. 22nd. 1 a.m.—Temp. of room,  $73^{\circ}$ . Temp. of room had fallen by error to  $68^{\circ}$  earlier in the night, when the patient became choked up and very restless, due, I believe, to the absence of moisture; tubes were clear. When this happened the matter secreted dried hard and brown on tube. After getting up the fire again, and full evaporation, he became quiet and slept well, all agitation leaving at once. Continue milk and lime-water at suitable intervals. Some blood in discharge from wound. 8 a.m.—Removed tube for first time since 12 midnight, it having been in *situ* eight hours; it was partially filled, mucus of a bloody tinge escaping from under main tube. Child slept nearly all night very quietly when evaporation was fully established. Temp. of skin to hand seems perfectly natural. (Some mucus and thick membranous matter were placed in a solution of equal parts of liq. pot. and aq. experimentally. A like quantity of mucus, etc., was placed in like parts of acid nit. and aq. That placed in the liq. pot. dissolved perfectly in half an hour, that placed in the acid mixture seemed to be coagulated at once and remained wholly insoluble, and has remained so up to this day, May 3rd, 1878. This fact may, perhaps, have some value in like cases). Temp. of room,  $78^{\circ}$ . When the fire went down the room seemed very cold to those present. 10.15 a.m.—Temp. of body,  $99^{\circ}$ ; pulse, 80; resp., 24; temp of room,  $74^{\circ}$ ; continue milk and lime-water. Considerable quantities of frothy mucus are coming up. 11.30.—Had a full motion. 11.45.—Patient very jolly and playful. 2.45 p.m.—Cleaned tube, and removed a very thick matter. Temp. of room  $76^{\circ}$ . 3.35.—Temp. of room,  $81^{\circ}$ ; breathing very quietly through tube. 4.45 p.m.—Temp. of room,  $85^{\circ}$ ; pulse, 88; still intermits. 5.40 p.m.—Temp. of room,  $85\frac{1}{2}^{\circ}$ ; sleeps very quietly. 8 p.m.—When

swallowing milk now a little escapes by edge of tubes. 10 p.m.—Milk now escapes in quite a little stream, fully a teaspoonful came away. Temp. of room,  $78^{\circ}$ ; pulse, 76; resp., 22. 11.30.—Bloody mucus now escaping.

Sunday, Dec. 23rd, 12.30 a.m.—Temp. of room  $74\frac{1}{2}^{\circ}$ . 4 a.m.—Do. 8.30; has slept fairly. Continue milk and lime-water. 6.30 a.m.—Temp. of room,  $72^{\circ}$ ; fire had gone down; no steam. Child again very much disturbed and restless; got up fire and steam, when these symptoms passed away at once; second time this has happened, with the same result. 9.40 a.m.—We examined larynx and surroundings, found them red and swollen, the small ulcerated patches that existed on right tonsil last Sunday (a week ago to-day) have disappeared. Give m. ij. tinct. nux. vom. every three hours for paralysis of spiglottis. Repeated doses did not seem to do any good. Closed main aperture of tube with finger to test breathing. He seemed to experience great difficulty. On placing his ear over child's mouth, Dr. Reddy felt his breath on his cheek; no odor from tube or its contents; patient is bright and cheerful; plays contentedly with toys. 11.40 a.m.—Temp. of room,  $74^{\circ}$ ; pulse, 75; intermits; resp. 22, ordered.

Rj. Acid tannic..... 3 ij.

Glycerin pur ..... 5j.

M. ft. lotio.

Sig.—Ut. dictu utend.

3 p.m.—Cleaned tube, touched parts with p. eq. liq. pot. and aq. It caused no inconvenience. A good deal of clear mucus came away. 7 p.m.—Milk still escapes from wound on swallowing. 10 p.m.—Patient asleep; temp of room,  $80^{\circ}$ . 10.40 p.m.—Do.  $85^{\circ}$ ; pulse, 80. 11.10 p.m.—Commenced breathing slightly through his nose fourth day after operation. Took half a cup of milk, it still runs away from wound in trachea. No membrane formed on lips, mouth or edges of wound at any time. Creamy pus now always on tube when it is withdrawn. 12 midnight.—Temp. of room,  $81^{\circ}$ ; sleeping quietly; nostrils dilating.

Monday, Dec. 24th, 9 a.m.—Tube has not been removed since 1 a.m., it contains a muco-pus; milk still escapes from wound on swallowing; patient has slept very well all night; no motion from bowels yesterday; he urinates frequently and in large quantity, it is clear and normal (not tested for albumen); he plays with his toys, pulse, 83, regular; resp., 22; temp. of room,  $77\frac{1}{2}^{\circ}$ ; examined throat, parts still look congested; applied lotion of tannic

acid and glycerine, it seemed to be very unpleasant to him, he gasped, and discharged a quantity of mucus through tube, in fact shot it out, it was yellowish. 3 p.m.—Bowels have moved; had two cups of milk; muco-pus escapes from tube, cleaned it after being in situ five hours. Discharge from tube is free. 4.30 p.m.—Temp. of room,  $81\frac{1}{2}^{\circ}$ . While child was leaning on father's shoulder he stopped breathing suddenly, a long shred came partly out of tube and returned on inspiration occluding it; he choked and fell back powerless; no breathing could be detected. Mr. George W. Nelson, who was in charge of case at the time, promptly removed inner tube, and, after passing a feather four times, he succeeded in dislodging the shred; child's face was purple; some mucus also came away. When respiration returned slowly, he was unconscious for several minutes, and then gradually recovered; child's father thought him dead. At first child clutched at throat like a wild thing. An accident of this kind shows very conclusively that skilled assistance should always be at hand. The after treatment being decidedly as important as the operation, as these notes will, I think, show. A little indecision here, and my patient was lost. 8.45 p.m. pulse,  $80^{\circ}$ ; resp., 25; sleeping quietly.

Tuesday Dec. 25th.—Xmas day, 5 a.m., temp. of room,  $84\frac{1}{2}^{\circ}$ . 6.45 a.m.—Cleaned tube, it was completely filled; restlessness disappeared at once; child passed a very good night. 10.30.—When Dr. Reddy came in we withdrew centre tube and closed aperture of main instrument; child gasped twice, air rushed in by the mouth. As choking was imminent it was not continued, a sufficiency of air not entering. By touching back part of throat with an aneurism needle gently, some spasmodic action was induced, when a large quantity of thick caseous looking matter was got up, mixed with mucus. 2.20 p.m.—Child has slept quietly for two hours; pulse, 80, full and regular; resp., 28; temp. of room,  $75\frac{1}{2}^{\circ}$ ; still evaporating water as before; motion from bowels; urinates freely; urine is of a light straw color, and clear. 3 p.m.—Removed centre tube and gave a drink of milk, a good deal got into trachea, caused reflex action, when about a teaspoonful of thick mucus was voided, followed by bloody mucus. The exudation matter now deposited on inner surface of centre tube not so difficult to remove; nostrils dilate regularly. A drop of nasal mucus moved up and down on inspiration and expiration. 7.30 p.m.—

Removed centre tube, closed orifice of main instrument; he cried audibly.

Wed., Dec. 26th, 1 a.m.—Pulse, 80, regular; temp. of room  $78\frac{1}{2}^{\circ}$ ; child sleeping quietly. 9 a.m. patient has slept quietly all night; centre tube has not been removed since 7.30 p.m. yesterday, or for thirteen and a half hours. We evaporated the water in a large tin boiler, on a kitchen stove burning coal. We found by experience that the larger the quantity of water put in boiler, say four or five gallons, the greater was the volume of steam produced. If but a gallon or so was placed in boiler and allowed to nearly evaporate, and another was added, vapor was checked for a time. At times when desirable we filled upper part of room with vapor; patient now breathing slightly through the nose; he ejected a large quantity of muco-pus through tube; pulse, 80, full and regular; resp., 22; temp. of room,  $83^{\circ}$ ; temp. of body,  $99^{\circ}$ . Whenever centre tube is out and patient is allowed to drink, there is a greater escape of fluid; milk still comes away in small quantities on swallowing. Again tested breathing through mouth as before; he breathed with some difficulty, and cried, continued for several minutes; he did not choke, nor was there that congestion of the face observed before. He got up a large quantity of phlegm. Centre tube now removed without any resistance from patient, heretofore he has objected to its removal, and pointed to it to have it replaced, when he is satisfied. 12 noon.—Temp. of room,  $88^{\circ}$ ; child took a small quantity of solid food for first time since operation. 2 p.m.—When handed a child's trumpet he blew through it, producing a slight noise. 7 p.m.—Has had two cups of beef tea. Had a solid motion from bowels, the first; still getting up phlegm in considerable quantities; temp. of room,  $88^{\circ}$ . Centre tube was removed at 4 and 7.30 p.m., no adherent matter on it; closed main tube; child said father distinctly. 10.30 p.m.—Temp. of room,  $80^{\circ}$ ; child sleeping quietly.

Thursday, Dec. 27, 5.40 a.m.—Cleaning tube gave him a great deal of relief. He has passed a good night. Temp. of room,  $83^{\circ}$ . 10 a.m.—Pulse, 80, full and regular; resps., 23; temp of room,  $77\frac{1}{2}^{\circ}$ ; temp. of body,  $98\frac{3}{4}^{\circ}$ , taken in axilla throughout. 11 p.m.—Tested breathing again; he cried, producing articulate sounds; no congestion of face. Care was taken not to press instrument back on posterior wall of the trachea. A creamy pus-like fluid comes away from instrument. After drinking beef-tea a little escapes from wound, followed by a

good deal of phlegm. 7.30 p.m.—Removed tube, it was nearly clear. Nothing adhered to its sides. Pulse, 80, full and regular; temp. of room,  $76\frac{1}{2}^{\circ}$ ; resps., 22. Removed centre tube, closed orifice of main tube with finger, remaining fingers on platform of instrument to prevent any pressure on trachea. He breathed freely through the mouth, some air escaping by sides of instrument. The test did not cause as much disturbance as before. 9 p.m.—He took bread and butter, and swallowed with ease.

Friday, Dec. 28th, 1.10 a.m.—Child sleeping quietly. 8.30 a.m.—Patient has slept twelve hours, from 8.30 last evening. 9 a.m.—Removed centre tube and cleaned it. 12.30 p.m.—Again tested breathing by mouth, same as before; a good deal of mucus present; air passes through nose; urinates freely. Temp. of room,  $75^{\circ}$ ; but little steam at present. 6.30 p.m.—Temp. of room,  $82\frac{1}{2}^{\circ}$ ; patient better. Takes bread and beef tea. As soon as centre tube is out he points to it and wishes to have it replaced at once, when he is perfectly satisfied. We have noticed that he seems better and brighter every afternoon from about five to seven o'clock. Temp. of body,  $98\frac{5}{8}^{\circ}$ ; pulse, 74; resps., 24. Takes a cup of beef tea now and then. He breathes a little through his mouth. No signs of any pulmonary trouble. Chest is examined occasionally. Sleeps very well. Filling of the tube causes restlessness. On swallowing, fluid still trickles away from wound. 7.30 p.m.—Tube again nearly filled, clearing gave relief at once. 11 p.m.—Temp. of room,  $75^{\circ}$ ; patient asleep.

Saturday, Dec. 29th, 1.20 a.m.—Child choked as on first occasion, when he again became unconscious, and was some minutes in recovering. Tube this time was not filled. Using a feather got a piece of membrane away from lower part of trachea. Temp. of room,  $76^{\circ}$ ; pulse, 86; resps., 22; temp. of body,  $99^{\circ}$ . 8 a.m.—Motion from bowels. Patient very lively, passed a good night. Again tested breathing as before with the same results, he coughed twice. This second attack of asphyxia as late as the tenth day shows the absolute necessity of skilled assistants. I am very much indebted to Messrs. H. Chandler, R. Leprohon, and Geo. W. Nelson, students in medicine of the Medical Faculty of Bishop's College, for assistance by day and night throughout the case. 8.30 a.m.—A large piece of membrane and mucus shot partly out of tube and slipped back again on inspiration, during the next expiration it was secured and withdrawn. The exudation matter became very tenacious during

the night before the choking fit and dry within tube. The amount of secretion is becoming less and less. Upper part of trachea can now be seen through wound, its mucous membrane is still red. No membrane of croup to be seen above. Also examined throat carefully from above, could discover nothing but highly reddened mucous membrane. All traces of ulcers have disappeared. Patient very bright. Tongue clean. Takes beef tea occasionally, alternates with milk; bread is not now swallowed with the same ease. The paralysis of the epiglottis is evidently disappearing, as scarcely any milk escapes on swallowing, but a few drops. 2.30 p.m.—Tubes can now be cleaned with cold water. Temp. of room,  $73^{\circ}$ ; creamy pus in tube; pulse, 80, full and regular; temp. of body,  $99\frac{1}{3}^{\circ}$ ; resps., 20. 10.40 p.m.—Temp. of room,  $82\frac{1}{2}^{\circ}$ ; child sleeping.

Sunday, Dec. 30th, 12.45 a.m.—Temp. of room,  $83\frac{1}{2}^{\circ}$ ; child has slept all night. 9 a.m.—He took beef tea and said "No, no" distinctly. 10 a.m.—Dr. Reddy met me to remove main tube. The tapes around next neck were cut away, centre tube was taken out, and the main tube closed by working a screw that closed its valves, the remaining small aperture was closed. Respiration was somewhat impeded, again dilated blades when a quantity of mucus and blood escaped, when it was closed and partly withdrawn, then finally removed. The edges of wound had granulated up to sides of instrument, leaving a circular opening, through which the child commenced to breathe very fairly. It was removed in eleven days thirteen and a half hours after the operation, or two hundred and seventy-seven and a half hours. On closing aperture with finger child breathed through mouth very well. A silk handkerchief was folded in four thicknesses and applied loosely over the wound. Respiration through the mouth was regular and fair. He cried out when the opening was closed. Pulse, 80; resps., 22; temp. of body,  $98\frac{1}{8}^{\circ}$ ; temp. of room,  $74^{\circ}$ . On taking a cup of beef tea a small quantity escaped. Size of opening is that of a good-sized pea. Child said mamma.

11 a.m.—Is playing with toys. He asks for different things, some clearly; answers questions, some words distinctly, others indistinctly. Child is learning to talk, having commenced but three months ago. Mother states that he speaks as plainly, but not so loud, as before illness. When tube was first removed he was afraid to speak, but commenced in twenty minutes, 2 p.m.—Child very busy playing. 4 p.m.—Still playing. When he drinks it produces chok-



ing, when some of the fluid escapes by the wound. Temp. of room 75°; resp. 22; pulse, 80. Wound is decreasing in size, healthy granulations are apparent, mucus comes away. 7.40 p.m.—Drinks a good deal, with same results. Temp. of room 80½°. 10.55 p.m.—Pulse, 84; resp. 30; temp. of room 77°; is sleeping, but restless, a gurgling sound is heard on each inspiration. 12 midnight, breathing quick, rapid and noisy.

Monday, Dec. 31st, 1.40. p.m.—Gurgling sound is produced when he takes a short and rapid breath, not when he respire quietly. Pulse, 82; resp. 24;

Monday, Dec. 31st, 2 a.m.—Child sleeping quietly. Less difficulty in breathing, pulse, 82; resps. 24. temp. of room 80°. 3 a.m.—Respirations rather more regular, and less labored. Tried to cough up some mucus, but was unable to do so. Temp. of room 77°. 9 a.m.—After 3 he slept quietly and well. Whenever he drinks spasm and coughing are produced. He is up and playing about. Pulse, 75; resps. 21; temp. of body, 98.½°; temp. of room 79°. The wound is closing rapidly, and healing from below upwards; depth of wound was three-quarters of an inch when instrument was removed. He is still unable to get up mucus. There is a slight discharge of pus from the wound. Silk handkerchief is still retained; slight whistling sound through wound at times. Child nearly well. 2 p.m.—Commenced using the tinct. nux-vomica again. 2.10 p.m.—As the case was progressing very favorably, regular watching ceased, by skilled assistants. My brother ceased taking notes. 6 p.m.—Edge of wound in apposition. 9.30 p.m.—As before.

Tuesday, Jany. 1st, 1878,—New-Years-Day,—2.30 p.m. Child breathes slightly through wound at times, markedly when he cries. Has slept all night. Pulse 80. 9.30 p.m.—Some mucus escaping from wound; child up and playing; temp. of room 75°. As soon as moisture is absent he becomes agitated; chokes less on swallowing; free discharge of mucus.

Wednesday, Jany. 2nd.—Child had a restless night; bowels have moved.

Thursday, Jany. 3rd.—Child passed an excellent night. He is bright and cheerful. Takes solid food. When he cries air rushes in through wound. Pulse, 80.

Friday, Jany. 4th.—Child very well, wound remains closed, except when he cries; choking and noise produced on swallowing have nearly disappeared; bowels have moved; partakes of solid food

with ease; temp. of room 70°. Child was removed to a bedroom in upper part of the house.

Saturday, Jany. 5th.—Continuing well.

Sunday, Jany. 6th.— do. do.

Monday, Jany. 7th.— do. do.

Tuesday, Jany. 8th.—Harsh breathing has set in.

Wednesday, Jany. 9th.—Breathing with great difficulty and noise; sub-sternal depression marked. Case looks grave. Had patient removed to basement, and got up steam. He passed a bad night before coming down. Gave him doses of mij. tinct. digit. and pot. iodid. gr. i. every three hours touching throat with liq. pot. every three hours. At noon he was better.

Thursday, Jany. 10th.—Had a fair night, child's head has to be kept nearly level with body; if elevated too much breathing is interfered with. Pulse rapid and weak; opening closed. Patient was better during the evening.

Friday, Jany. 11th.—Child a great deal better; Not much difficulty in breathing; bowels regular; child up and playing again; continuing treatment and steam. Temp. of room 76°.

Saturday, Jany. 12th.—Child nearly well, no more bad symptoms. Steam acted as well as usual. Bowels regular. Tongue clean. Child was again removed to upper part of house, water was evaporated in hall in but small quantity, when the hoarseness again returned. Gave medicine as before. Stridulous breathing at night, substernal depression, etc., this continued for some nights. At times it seemed very alarming indeed. Its rhythm was altered in certain positions, this continued off and on until Feb. 9th, when it nearly ceased. It has returned slightly at times, but is not followed by any cyanotic symptoms. Child's health is excellent. The scar measures three-quarters of an inch in length and a quarter of an inch across in its central part. Ceased paying any visits after this date. Put the little fellow on a tonic.

The instrument used was a tracheotomy tube and set by Walton of Lambeth street, London, near St. Thomas Hospital, the most perfect instrument that I have yet seen, its working is admirable.

Dr. Reddy attended throughout as consulting surgeon. I am deeply indebted to him for many valuable hints, culled from many years of very active professional life.

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## Progress of Medical Science.

### ON THE VALUE OF KOUMISS IN THE TREATMENT OF NAUSEA, VOMITING AND INABILITY TO RETAIN OTHER FOOD IN THE STOMACH.

BY N. JAGIELSKI, M.D., M.R.C.P.L.,

Physician-in-Ordinary to the Infirmary for Consumption, Diseases of the Chest, &c.

The author selected ten remarkable cases on this subject that had come under his own observation, five cases successfully treated with koumiss by other medical practitioners, whose names are given below.

The first case described by Dr. Jagielski was a patient of Mr. Wallis Mason and Mr. B. Floyer, a very anæmic lady, who was confined with twins at full term. General paralysis followed, her prostration had become extreme in six days after the confinement in consequence of her inability to retain any food on her stomach; and when seemingly dying the koumiss was given to her in small quantities at frequent intervals. All nausea and vomiting had disappeared during the exclusive treatment with koumiss, which proved, besides to nourish the patient alone sufficiently, to increase her strength and bodily weight in a very short time. The three medical attendants were firmly convinced that in this case life was saved by the koumiss.

2. A case of pregnancy with hæmoptysis, subsequent vomiting, and inability to retain anything on the stomach, in which the treatment with koumiss allayed the vomiting speedily, and enabled the patient to come safely over her confinement, her health remaining very good afterwards.

3. Acute attack of chronic bronchitis, with excavations in both lungs, &c., in a gentleman 78 years old, whose hapless condition on the sixth day of his severe illness caused Dr. Jagielski to give him the sparkling koumiss, under the influence of which the constant vomiting was readily overcome, and the rapidly declining strength renewed. His excessive expectoration diminished, his sleep returned, and his relative health was soon restored.

4. A case of most obstinate gastric catarrh, with all the appearance of a carcinoma pylori, complicated by very distressing vomiting and consecutive exhaustion, which resisted all drug treatment, and all varieties of dietetic food, soon yielding to the exclusive use of koumiss.

5. A case of uninterrupted hæmoptysis during nine weeks, with vomiting and inability to keep down any food, in which the styptic treatment was continued all the time with no good results. The koumiss treatment was followed by rapid improvement and complete recovery.

6. A case of pleura-pneumonia dextra followed by intractable vomiting and inability to retain food in the stomach, treated successfully

by the koumiss. Equally favorable results, by the sole use of sparkling koumiss, were quoted by Dr. Jagielski in the following cases:

7. A lady, 66 years old, with pleuritis exudative dextra, a long sufferer from chronic bronchitis, with very severe vomiting, and scarcely any food in the stomach for ten days.

8. A case of old mitral incompetency, with anasarca and gastric catarrh, with constant vomiting.

9 and 10. Two cases of diabetes mellitus. Almost in a dying state from inability to retain food on the stomach and consecutive irritation.

Further, Dr. Myrtle's, of Harrogate, four cases described in the *Lancet* of December 12th, 1874, one of marasmus in the adult, with unchecked vomiting—successful; one of pyæmia, with sickness and unchecked vomiting—successful; one of phthisis (advanced) with ulceration of mucous membrane, diarrhœa and hectic—successful; one of rheumatic fever, with gastric irritability of a most formidable nature—successful; and Mr. Carter Wigg's case, of Southminster, Essex [see the *Lancet* of January 9th, 1875], of heart disease and albuminuria, with constant sickness, retching, and vomiting, likewise successfully treated with koumiss.

In concluding, Dr. Jagielski recommended the koumiss treatment as harmless at the worst, and the more rational means with which to commence the early and primary treatment of disease for which it is suitable.—*Dublin Med. Press*, April 10, '78.

### DIARRHŒA OF INFANTS.

Dr. René Blanche (*Bull. Gén. de Thérap.—Phil. Med. Times*) urges that whenever diarrhœa occurs in young infants it should be checked immediately and not allowed to make headway. The medicine he employs is the same in every case, though modified somewhat according to the circumstances. In order to prepare for this, diminution of the ordinary diet is directed, and appropriate enemata after each passage, with cataplasms to the abdomen. Then every morning a small teaspoonful of an emulsion made of equal parts of ol. ricini and syrup acaciæ is given and repeated every day for three, four or five days. For infants under six months  $\mathfrak{Dj}$  ol. ricini is enough; from six months to two years,  $\mathfrak{ss}$  to  $\mathfrak{ss}$ . If after a day or two the stools improve, the dose is maintained, but if they are still fetid and glairy an equal dose may be given in the evening as well as in the morning. When the passages are very frequent, one to three drops of laudanum may be added in the course of twenty-four hours. Blanche thinks enemata very important. A large enema of infusion of chamomile may be given at the outset, followed by a smaller one of starch, twenty minutes later.

# ON THE TREATMENT OF DIPHTHERIA BY LARGE DOSES OF CALOMEL.

By M. C. REITER, M.D.

A very considerable number of the younger physicians of Pittsburg having formed themselves into a club for mutual improvement, under the title of "The Academy of Medical Science." They took up the subject of Diphtheria for discussion at their last regular meeting.

Being known to differ *in toto cœlo* as to its nature and treatment from my *confrères* I was kindly invited by a good friend and member, Dr. James McCann, to be present at that meeting.

A paper was read by Dr. Smith on this disease, in which he adopted the popular and prevailing opinion as to etiology and treatment. When he had done, I was invited to address the society, and did it; but so disconnectedly and lamely that I feel constrained to arrange my views in order, so that my position may be clearly defined and substantially stated.

In the epidemic of diphtheria of 1863, it was my misfortune to have my first severe case in the person of my grandchild and namesake, a boy of two and a half years. The mischief fixed itself on the Schneiderian membrane of both nostrils, reaching into the pharynx. Inside of forty-eight hours, the common treatment then in vogue being followed, the entire surface became gangrenous. The glands in the neck became enormously swollen, and the poor boy died "none too soon." In watching this case, I became convinced that the disease is not a *poison* of the blood or in the blood, but an excess of *fibrin*, called, in old times, the inflammatory diathesis.

The glandular swellings are not diphtheria, but a sequence, the fibrin having not only transuded but mechanically closed the capillaries, gangrene or else a slough ensues; and these glands are poisoned, as other glands are, from a virus conveyed to them by the lymphatics in the structure; as fatally killed and lifeless as a crushed hand or foot over which the wheels of a railroad-train have passed.

I have never yet seen glandular enlargement usher in an attack of diphtheria. On the contrary, the transudation has changed from a clear white to a dirty grey, a portion has been thrown off with the epithelium, and some underlying tissue has putrefied, before adenitis manifested itself.

Many years ago—I am now a physician of many years' active professional life—I became dissatisfied with the old combination of nitrat. potass., calomel, and ipecac in treating the inflammatory diseases incident to the mountain region in which my lot was cast, and, after bleeding and cupping, had trusted to large doses of calomel alone, with either liq. ammonii acetatis or potassii bicarb. in interval.

The readiness with which patients take this tasteless stuff called calomel, and the satisfactory results from its administration, have, year by year, moulded me into a calomel doctor. The sad, melancholy and

heart-rending scene of "Willie Winkie's" last hours made me *vow* I would give calomel largely to my next diphtheritic patient.

The cases reported need no comment; they are accurately given; but the *modus operandi* of calomel, for which I had conjured up a hypothesis, is now clearly demonstrated in the invaluable work of that profound and industrious physician of London, Dr. Murchison. His teaching is not only making the pathway to success more plain and clear to the faithful and earnest student in the art of healing, but he is casting a grand halo of glory on his profession. His last work, "Functional Diseases of the Liver," has solved every obscurity in understanding how calomel cures diphtheria. I would say to every young physician embarked in the perilous enterprise of fighting disease, *Read this book, STUDY THIS BOOK*, ponder its doctrines, and pray Almighty God, the Source of all light, truth, and power, to enable you so to appreciate its teaching that you may go forth to your fearful, solemn, and responsible work at the bedsides of the suffering, armed with the panoply of truth, and with a bold and fearless heart.

Those who oppose the doctrine and resist my conclusion may say, "Have you never given quinine, iron, stimulants, beef-tea, etc., in diphtheria?" I say, emphatically, "*No!*" I have relieved patients suffering from the sequelæ with this plan of treatment, as I have treated successfully nephritis or phrenitis following scarlatina with venesection and other antiphlogistic remedies.

One case reported, No. IV, followed No. III, and the subject was the servant-girl in the family. Her throat was intensely red, without any tumefaction. A spot of exudation, very thin, was on the right tonsil; but the history of the case shows she had hot skin, a small, frequent, quick, and hard pulse, and complained of distressing pain in occiput and down the spine. I feared the force of disease was tending to the meninges of cerebellum and cord, and, confident in my sthenic conception of diphtheria, I bled her to syncope, and gave calomel as narrated. On the fifth day of convalescence I was sent for to treat acute rheumatism of the right wrist, which yielded to acetate of ammonia, tr. rad. aconiti, and colchicum vin. (British), together with a dose of pil mass hydrarg cum comp extract colocynth in thirty-six hours.

To all who will try this plan I would only say, give calomel freely and boldly every hour until the intestinal discharges resemble the fresh-water polyps in water-troughs, gelatinous, and of a bright dark-green hue; then your patient is safe; and, if you fear salivation, administer a dose of castor oil. I have never seen pyalism in a single case, and seldom give any laxative. The calomel purges, but not excessively, even in children of three or four years who have taken a half-ounce. Should prostration follow these heavy doses, you can rely on the fact that you have been mistaken in your diagnosis, and pronounced a case of follicular tonsillitis diphtheria, and can quit your remedy without any

rious results. Cases I., II., and IV. show this fact clearly.

I insist on giving calomel in ice-water in summer, and cold water in winter. Fill a teaspoon half full of water, and drop the powder in it; get the patient to open the mouth, and tumble it in; then wash down with fresh water.

Calomel should be given in its purity.

The hypothesis which I had adopted for years was as follows: The functions of the abdominal organs in inflammatory diseases were suspended for want of an influx of the *vis-vitæ*, which was largely eliminated by the breaking down of tissue, which is rapidly destroyed in disease. The resulting compounds which should be thrown off by the liver, kidneys, and intestinal mucous surface were retained in circulation, and then became poisonous blood-elements, fearfully increasing the danger of the sufferer. I supposed each particle of calomel to exercise the power of the point of a needle on the electric fluid, and attracting vital force to restore functional activity.

This may be called a mysterious hypothesis. To the student of natural science profound mystery attends every step of his progress. Catalysis is certain, but very mysterious. Optics demonstrates that we never see anything, but discern an image on the retina of our eyes. No study is so awfully mysterious and strangely perplexing as the minute anatomy of the ear. What was it sit in the cochlear and semicircular canals in Mozart's and Beethoven's ears, and interpreted the impressions made by the aqua Cotunnii on the gossamer threads of the auditory nerves, woven into a film and suspended there? Science leads to mystery deep, unfathomable, and awful. I knew an old veterinary surgeon for many years, and have seen him cure relaxed and distended capillaries in the conjunctivæ of horses' eyes, remaining after the reduction of acute conjunctivitis, in a few hours by blowing calomel under the lid from the cylinder of a goose-quill.

Calomel should be given in large doses, and repeated every hour until the bile in the defections assumes the appearance described. Then you are done with it, and run no risk of ptyalism. When given at long intervals you do not secure free and frequent evacuations, and it may have had the specific effect you desire long before you can discern it. A liver relieved and acting healthfully and vigorously, portal veins readily emptying their contents into this organ, may be attended by lively action of the lacteals, which would convey calomel into the blood.

I permit my patients to take cold water and lemonade *ad libitum*, and insist on their drinking frequently mucilaginous fluids. I prefer barley gruel, but give gum-arabic water, flaxseed tea, and slippery-elm water, and nothing else,—*no food whatever*. During convalescence in the feeble I give small doses of quinia. With the calomel I give every third hour chlorate of potash. It has never done injury, but I doubt if it is needful.

The metamorphoses which are brought about by

and in the liver, as shown by that excellent compilation of experiments and their results, published by Dr. Murchison, make it very easy to understand how a liver, to-day ceasing to destroy fibrin, may in a few days hence permit the blood to be surcharged with lithic acid, as happened in Case IV.

I have notes of many cases recorded, but have only transcribed as many as I thought needed to explain my hypothesis.

*Case I.*—September 23, 1863, 11 a.m., was called in consultation with Dr. Robinson to see the daughter of Mr. Beatty, aged 3 years, who became ill the day before. She was a beautiful child, fair hair and blue eyes, with good organization. Countenance was distressed; almost perfect aphonia; respiration slightly stridulous; pulse small, hard, quick, and frequent; the whole fauces of a bright red, and covered with slight patches of exudation. The doctor had given a very unfavorable prognosis (had only seen her a few hours previous to my visit), in which I concurred, as the mischief had fixed itself mainly in the larynx. His treatment was five grains of potass. chlorat. in solution every third hour, and pencilling throat with solution of nitrat. argenti in glycerin. I prevailed on the doctor to continue his treatment, and give ten grains of calomel in a little ice-water, and repeat five grains every hour until we should meet again the next morning. Diet: cold water, lemonade, and barley gruel.

September 24, 10 a.m.—Met the doctor, and found our patient very much improved; voice almost restored; had two dejections; continued treatment.

September 25, 10 a.m.—Patient cheerful and bright; voice restored; pulse soft and natural; no prostration; respiration normal. Continue calomel every third hour until stools appear like polyps in water troughs. Add syrup senegæ to potass. chlorat. solution to relieve cough.

September 26, 10 a.m.—Patient took castor oil at night, when stools manifested characteristic mercurial action. Had taken four drachms calomel, and no prostration. Is now a vigorous young lady.

*Case II.*—July 24th, 1865, 11 a.m., was hurriedly called to see a child of John Eicher. I could not go,—was an invalid, and had been already overworked,—but got Dr. James McCann to visit it, and promised to see it myself in the afternoon. Dr. McCann reported that the father, who went out with him, said that they had buried an elder child one week before from diphtheria, and that the babe (eight months old) was now suffering from the same disease, and the attending physician pronounced the case hopeless. The child was well formed and nourished; pulse small, tense, and so frequent I could not count it; respirations frequent, difficult, attended by croupal noise; and at intervals there was a short, hoarse, expulsive, breaking cough. The skin was damp, face pallid and rather bluish in hue; the countenance had a worn, exhausted expression, and the eyes dull. The fauces had a glossy-red appearance, and the left tonsil had a diphtheritic film. Ordered three

grains calomel every hour; potass. chlorat., 3i; aquæ destillat., ʒ iii. M. A teaspoonful every three hours, and throat to be pencilled with nitrat. argenti, ʒi; glycerin, ʒi; barley gruel or gum water and ice water *ad libitum*. When I proposed to Dr. McCann, in the afternoon, to visit this child, he protested; told me I had better spare my strength and visit hopeful cases. I told him I had promised, and would go. Found the case as hopeless as the doctor had depicted it, and had no expectation it could recover. Doubled the calomel powders and gave six grains every hour. Continued other treatment. I found the spoon daubed with calomel; ordered another, and showed them how to give the powder. And this is important. A spoon half full of water, powder dropped in the water, and then tumbled into the open mouth. Then give a drink of water to wash it down. In this way it escapes the lips and teeth, and the whole dose is swallowed. It does not touch the spoon, and therefore cannot adhere to it.

July 25, 8 a.m.—Patient much improved; eyes bright; countenance calm, except when it coughs; then expresses pain. Cough still croupal; respiration slower, fuller, and freer, and some mucus in trachea when it coughs; pulse 130, fuller and softer; bowels have moved twice; dejections exceedingly offensive and black; throat not so red, and exudation passing away from left tonsil.

5 p.m.—Patient doing well. Two dejections since morning; dark green and oily; not offensive; think fetor in first was owing to putrefied caseine. Give three grains instead of six grains of calomel every hour. Up to this time this infant of eight months had taken one hundred and sixty grains of calomel.

July 26, 9 a.m.—Improvement very marked. Child inclined to be playful. Slept well all night; had to be waked to administer medicine. Respiration almost normal; pulse 110; skin natural; cough still troublesome. Bowels moved three times; dejections watery and very green. Fauces very much better. Give calomel every fourth hour, and potass. chlorat. in interval. Give beef broth, without fat.

July 27, 9 a.m.—Improvement manifest. Respiration perfectly free, but cough somewhat annoying, yet not frequent. Bowels moved three times,—a dark clear green, consisting of gelatinous masses. Omit calomel, and give ol. ricini, ʒij. Continue potass. chlorat. every four hours, and give gtt. xv. in interval, of syrup. polygalæ senegæ.

July 28.—Cough better; patient doing well. Continue treatment.

July 29 and 30.—Convalescence progressing happily.

This child was brought to the office about the third week of October, and an abscess was opened at the angle of the left jaw, which discharged laudable pus and soon healed. Dr. McCann reported this case at the time, and I have considerably cut his report, but cannot avoid quoting his remarks on it in full:

"In this case, a babe eight months old, which appeared moribund on first and second visits, took

at the rate of  $3\frac{3}{4}$  grains of calomel every hour for sixty-eight hours, and instead of exhaustion the load was rolled off the vital organism, and it steadily attained its power and force of healthy vitality. In this case, as indeed in all the other cases we have noted, there was never a sign of mercurialism, no pytalism, no ulceration of the mouth or throat, and, judging by the *physique* of the child when last seen, no injury had resulted to its organism from mere mercury or disease. Thus the bugbear of the injurious effects of mercury on the system may be laughed at as utterly ridiculous."

Case III.—Thursday, September 13, 1877, 9 a.m.—Saw a female child of J. Yarnells, aged 5 years,—a family in which I have been the sole physician for twelve years. Found the child feeble, with hot skin, frequent but feeble pulse, complaining of great soreness in throat; no glandular enlargement. On inspecting fauces, saw the tonsils thickly covered with a white exudation, which extended over palate, velum palati, and pharynx. The tonsils had the appearance of two small hard-boiled eggs with shell removed. On enquiry, learned the patient had been ill since Monday. Gave a fatal prognosis, and prescribed tonics, stimulants, etc., to support against gangrene of fauces, which I felt certain would occur. On visiting her in the evening, found parents much rejoiced at apparent improvement. Some portions of exudation had come away, one-fifth inch in thickness. Dr. McCann was with me, and I had intended to experiment with bichloride of mercury; but the doctor wisely admonished me not to change treatment in a case which, to an enlightened medical observer, must inevitably prove fatal, when the parents believed the patient improving on the remedies administered.

On the following morning, September 14, the patient was moribund, glands of neck immensely swollen, breath had a gangrenous fetor, extremities cold, pulse could not be counted, and she died at noon.

Case IV.—At ten o'clock on Tuesday, October 2, 1877, was called to see the housemaid in same family, aged 17 years, and of a vigorous organization; had but lately come from England. Had felt unwell for several days, but had worked until the afternoon, when she told the lady she could not work any more, but must go to bed. Found her with flushed face, hot skin, anxious countenance; complains of soreness in throat and severe pain in head, especially in occiput, extending down spine. Has aphonia; can only speak in whisper; pulse small, tense, quick, and 136 in minute. Tongue furred; throat of an intense glossy red, and a thin patch of diphtheritic exudation on right tonsil; pain from this tonsil extends into right ear.

Bled her to syncope (twenty-four ounces), gave twenty-five grains of calomel, and in an hour twenty more, then ten grains every hour; if she complains of weakness, extend to three hours. Give ten grains of potass. chlorat. in solution every third hour, and nothing to be taken but lemon water, cold water, and barley gruel.



October 3, 10 a.m.—Pulse 100, fuller and softer; slept so comfortably since 4 a.m. that powders were given only every third hour. Bowels moved but once, although two drachms of calomel have been taken, and there is no prostration. Feels much better; very slight pain in head, voice improved, and film leaving right tonsil, but face is still too red. Continue treatment; if bowels are not moved at noon, give a teaspoonful of magnes. sulphat. in a cup of cold water. Eight p.m., condition comfortable; pulse 90; face paler; bowels moved once since she took the salts. Continue treatment.

Thursday, October 4, 10 a.m.—Had a good night; pulse small, quick and frequent,—a mercurial pulse I call it. Bowels had moved thrice, but the discharge, in color and consistence, did not warrant the omission of calomel. Continue treatment; touch right tonsil with solution of nit. argenti in glycerin, 3j to 3ss. The exudation has passed off, and epithelium with it. Ordered the stools to be carefully observed, and if the bile floats in dark, bright-green gelatinous masses, abandon calomel and give ol. ricini, 3iss.

Was sent for to visit patient at 9 p.m. Messenger said that patient had been unable to swallow anything since 5 p.m. When I saw patient, found her and friends much alarmed, but she had comfortable skin, pulse, etc. Suspected the diphtheritic inflammation had reached upper portion of œsophagus, and loss of epithelium had induced spasmodic constriction of circular fibres,—the same condition I had once combated in an old lady who had swallowed her tea too hot. Called for a cup of warm gruel, and urged the patient to fill her mouth and make a strenuous effort to swallow it. She succeeded so well that the contents of the cup were soon transferred to her stomach. This difficulty of deglutition passed away in two days. Finding in dejections characteristic bile, omitted calomel and ordered ol. ricini, 3iss. Continue potass. chlorat. and touch tonsil, then pass brush into œsophagus.

October 5, 10 a.m.—Patient comfortable; all symptoms favorable; only complaints of something in throat annoying her like a foreign body, but not painful. On inspection, saw that the uvula was about the size and shape of a marble, and had the appearance of a vesicle of water. Ordered it to be brushed frequently with a large camel's-hair pencil moistened with red-pepper tea. May take beef broth.

Saturday 6th, 9 a.m.—Patient quite well; palate nearly normal in appearance and size. Ordered one and a quarter grains, thrice daily, chlorat. potass. to be continued.

Sunday, 11 a.m.—Patient had some pain in wrist and shoulder of right side during night. Room has no fireplace, and nights are cool and weather damp. Prescribed blue mass, ʒss, and comp. ext. colocynth., ʒss, to be mixed and divided into four pills, to be taken at once. A half ounce spts. Mindereri, ten drops of wine of root of colehicum (British), and four drops of tinct. rad. aconiti, to be taken every three hours, and painful parts to be painted with Churchill's tinct. iodine.

Monday, October 8.—Patient to resume quinine. Rheumatism all gone; take Mindereri mixture thrice daily. In a week from this she went to her parents' home (thirty miles by railroad), and has been well ever since.

PITTSBURG, December, 1877.

#### WHEN NOT TO GIVE IRON.

Dr. J. MILNER FOTHERGILL, in an interesting article on this subject (*Practitioner*, Sept. 1877,) says: The conditions which call for the administration of iron are *par excellence* those where debility is combined with anæmia. In these conditions iron acts as a general tonic as well as increasing the number of the red-blood corpuscles. But there are certain circumstances which contraindicate the use of iron, and which are deserving of note and remembrance. It is not enough to say that in conditions of plethora and vascular fulness iron should not be given. There are other conditions in which it is well to resort to other tonics, and even to other remedial agents altogether. Pereira says that the contraindications are "great strength and activity of organs, excessive tonicity (characterized by a firm and tense condition of the solids), and redundancy of the red corpuscles of the blood—as in general excess of the blood (plethora), in fever, in acute inflammation, and in the sanguine temperament. To these may be added, congestion, or a tendency thereto, of important organs, especially of the brain and lungs, and intestinal irritation." Again he says: "administered in large quantities, or when the alimentary canal is in an irritable condition, all the compounds of iron are liable to excite heat, weight and uneasiness at the precordia, nausea, and even vomiting, and sometimes purging."

From the well-known action of iron in increasing the red-blood corpuscles no one would now think of giving iron in states of vascular fulness. It is unnecessary to say anything further on this subject. Then again conditions of vascular excitement are unsuited for the exhibition of iron. As long as there is rapidity of pulse combined with rise of temperature, so long must iron be withheld in the treatment of acute disease. When the convalescence is well established; when the pulse may be fast and small, but is without excitement; when the temperature is perfectly normal or below it; when the skin is cool, the face pale, and the tongue clean, then, and not till then, should the administration of iron be commenced. If it produce any gastric disturbance, or headache, or feverishness, it should either be totally abandoned for a time, or the dose be much reduced. Vegetable tonics, as quinine or strychnine, together with mineral acids, the hydrochloric, the phosphoric, or the hydrobro-

mic even in some cases, should be given instead; and then the iron, in small doses at first—to be taken after meals, especially dinner. So administered iron can often be tolerated, when it disagrees given in the usual way in combination with the vegetable tonics. The same rule holds good of the resort to iron when the pyrexial stage of ordinary phthisis has passed away. The tonics and acids must be given before food, and the iron after, either as the tincture of the muriate in acetate of ammonia, the carbonate, or Niemeyer's pill of sulphate of iron with carbonate of potash in a drop of syrup. But as long as the tongue is thickly coated, or red and irritable, it is well to withhold chalybeates altogether.

This is very true of phthisis. However much the general pallor, the lack of tone and loss of power seem to call for iron, it is useless, and sometimes worse than useless, to give it unless the tongue be clean, without irritability. If the tongue be red and irritable, bitters with bismuth are to be adhered to, until all intestinal irritability has passed away, of which the condition of the tongue is the best index; if the tongue is loaded with fur, bitters and acids are to be preferred with a little sulphate of magnesia, or a vegetable pill at bedtime; or both if necessary. The gastrointestinal canal must be got into a normal condition, neither too irritable, nor sheathed with a layer of epithelium, as indicated by the fur upon the tongue, before either chalybeates or cod-liver oil can be satisfactorily prescribed. About this my experience at the Victoria Park Chest Hospital constantly makes me more and more positive.

In ordinary convalescence from acute conditions it is well to commence with the lighter preparations, the ammonia-citrate, the tartrate, or the citrate of iron and quinine; afterwards the muriate or the sulphate will be tolerated equally well. But these latter forms often disagree during the early stages of convalescence. At times too the mixture of the sulphate of iron, with quinine, and a few drops of dilute sulphuric acid, is found to be heating, and each dose to make the patient uncomfortable, especially in warm weather; here the addition of a little sulphate of magnesia, not necessarily to the extent of producing purgation, will at once remedy the uncomfortableness so induced.

In atonic gout also iron is commonly of no service, and makes the patient uncomfortable. In the sanguine and plethoric forms of gout, iron is never indicated. But where there is evidence of chronic renal disease with anæmia, and even with albuminuria, then it commonly seems desirable to administer iron in some form. Very often, however, it distinctly disagrees. It is well to see that there is no acute action going on anywhere, that the

joints are cool, even if still enlarged before commencing with chalybeates. The bicarbonate of potash, or the potassio-tartrate of soda, with a little nux vomica, in infusion of buchu, with a liberal draught of water after each dose, are the medicinal agents to be adhered to until all is perfectly quiet. When the tongue is clean, the skin cool, and there is no evidence of much acidity, then small doses of iron may be commenced with. But for some time the iron and the potash should be taken together; if the potash is left off the iron disagrees. Especially is this the case with elderly persons. It may be laid down as a broad rule that the toleration of iron diminishes as the age increases. With old persons iron comparatively rarely agrees, and then only in very small doses; while young children take iron well, and it often is well borne by them in conditions which in the adult distinctly forbid its use. But as age advances the system seems to grow less tolerant of the drug in any form; and the dose must be much diminished. In advanced life, in convalescence after acute disease, or paroxysms of gout in any of its forms, chalybeates have often to be abandoned, and alkalies, as potash or ammonia, with vegetable tonics and bitters, substituted in their stead. It would seem that the power of the digestive organs to assimilate iron is strongest in infancy—except it be very young children and babies—and that it diminishes, until in advanced life the blood manufactured often appears to be interfered with rather than assisted by chalybeates. Consequently with old people it is often better to give them tonics with alkalies and easily digestible food than to give iron, when it becomes desirable to give a fillip to their nutritive processes.

There is one condition where iron is absolutely forbidden, and that is the condition known as biliousness. As long as there is a foul tongue, a bad taste in the mouth, and fullness of the liver, with disturbance of the alimentary canal, iron is to be prohibited; it is not only that it is of no service, it positively does harm. It aggravates all the symptoms, and intensifies the condition. Iron undoubtedly increases the oxydizing processes, but somehow or other in biliary disorders it does not suit. Defective oxidation is at the root of these states, and yet iron does not agree with such patients. As long as any of the symptoms remain, and there is any fur whatever on the tongue, iron must be withheld. The patient may be anæmic and iron seem to be urgently indicated, but it will do no good until the system is in the proper condition to receive it. Sir Joseph Fayrer's Indian experience is in full accord with this expression of opinion. He kindly furnished me with some notes on Indian and tropical maladies for my recent work, *The Practitioner's Handbook of Treatment*, and

in speaking of the treatment of hepatic congestion, accompanied by anæmia, he lays stress upon the resort to purgatives and vegetable tonics, and the avoidance of iron, until the biliary congestion is removed. "*When the portal circulation is relieved, some preparation of iron may be useful.*" (The italics are his, not mine.) The liver must be thoroughly unloaded by alkaline salines first; then some strychnia and nitro-muriatic acid may be taken in the day, the salines being only taken first thing in morning; and ultimately, when the liver is once more working efficiently, chalybeates may be prescribed. But it seems that the oxydizing power of iron embarrasses rather than aids the liver when working inefficiently; and when iron is given, the morning purgation by salines, mineral waters, or other means, should still be maintained. By attention to these points much may be done for bilious patients; aye! and much discredit avoided. Whenever, indeed, there is disturbance of the gastro-intestinal canal, bilious or other, chalybeates are contraindicated, and if given cause discomfort, nausea, and not uncommonly a pyretic condition. The digestive organs must be got into good working order before iron is administered, if it is to be properly assimilated. When given in large doses iron always blackens the stools, but if given in moderate doses and well assimilated this blackening of the stools is not so marked. The colour of the stools, then, may be utilized as an indication how far chalybeates are assimilated and are likely to be useful.

There are two different states found in women where iron is either totally contraindicated or to be given with great caution. The first is the condition of amenorrhœa in florid, plethoric persons. In such cases, especially if the patient be of tense fibre, depletory measures are to be resorted to, as local bleeding and free purgation. The other in the opposite condition of menorrhagia in certain females. Of course no one would think of resorting to any form of iron, however astringent, in these cases of menorrhagia which are due to a state of general plethora. But there are cases of menorrhagia associated with pallor and debility, where the usual compound of iron and extract of ergot is not so useful as is a non-chalybeate treatment. In these cases it is not any imperfection in the processes of blood-manufacture which is to be remedied, for the blood is made rapidly and quickly, only to be lost at each menstrual period. An irregular process of rapid blood-making with still more rapid blood-loss is established, and requires its appropriate treatment. It is undesirable to stimulate blood formation by chalybeates here, for the greater the increase in the bulk of the blood, the more excessive the catamenial loss; and to give iron is but to aggra-

vate the condition. It is here desirable rather to limit the rapidity of the blood formation, so that when the general vascular turgescence of the muscular period comes, it will not find the bloodvessels too distended with blood. This will lead to diminished catamenial loss, and so the blood-waste will be economized. For in these cases it is the proper practice to lessen the loss rather than to stimulate blood-formation. During the interval a little sulphate of magnesia, with dilute sulphuric acid, in some infusion of a vegetable astringent forms an appropriate medicinal agent, and should be given along with a restricted dietary. At the periods the dose might be increased and the patient kept quiet, while all aliment should be cold. By such a plan the irregular condition of rapid blood-formation and blood-loss will be converted into a steady state of slower blood-formation with diminished loss. The same rule holds good of other periodical hemorrhages, and especially of some forms of hæmoptysis.

Even in cases of menorrhagia where it is necessary to encourage blood-formation during the interval, it is often well to cut off the chalybeates a day or so before the menstrual molimen, and to substitute for it the mixture just mentioned above. By such plan the blood-waste by the catamenia is economized, and the necessity for great blood-formation minimized. "There is poverty from waste and poverty from want," as Dr. Mitchell Bruce pithily puts it, and each requires its own appropriate treatment. At times with women there is both, and then combined measures are required.

Finally, the consideration of iron here is confined to its use as an hæmatic, its use in pyrexial affections as erysipelas or scarlatina not being included. When used as an hæmatic, it is clear that certain points must be kept in view. First, that the digestive organs be in fair working order, and second, that certain precautions be taken as to its administration when it is necessary to resort to it.

Since writing the above, Dr. Hughlings Jackson tells me that at one time he did not acquiesce in Brown-Séquard's idea, that iron does not suit epileptics, but that a more extended experience has convinced him that it is so. When iron is given to epileptics who are anæmic, it may improve the condition of the blood, but that while doing so, it increases the tendency to fits. It may improve the general condition, but it aggravates the epilepsy.

#### CURE OF EPILEPSY.

In the opinion of Kunze we possess in curare a remedy by means of which we may cure cases of epilepsy of long standing. He employs a solution of seven grains of curare in seventy-five minims of water, to which he adds two drops of hydrochloric acid. At intervals of about a week he injects be-

neath the skin eight drops of this solution, and in various cases in which convulsions had occurred for several years he obtained a complete cure after eight or ten injections.—*Canada Jour. Med. Science.*

#### CLINICAL LECTURE ON THE FORMS OF DYSPEPSIA AND THEIR TREATMENT.

Delivered by WILLIAM PEPPER, A.M., M.D., at the University Hospital, Philadelphia.

**CASE I.**—P. Mc., forty-seven years of age, a laborer, had malarial fever some twenty years ago, with derangement of intellect. Has lately been in the habit of tending brick-kilns for thirty-six hours at a time. Swells up after eating, feels drowsy and heavy, and belches wind. These spells come on at any time. His tongue is large and flabby, and its papillæ are enlarged. The man has not indulged in any intoxicating drinks for the last ten years, but still smokes a great deal, and drinks three large bowls of coffee daily. You will meet with a great many cases of this kind in your practice. There are very evidently two elements which we have to deal with here—(1) torpor of digestion; and (2) very marked sympathetic nervous disturbances. The dyspepsia may result either from the fact that the food merely goes through the stages of digestion slowly, and so ferments and evolves gas, or it may come from a defective supply of gastric juice, or from defective peristaltic action. In other cases there will be marked nervous disturbances. These are very marked in the present instance, and may therefore co-exist with the gastric symptoms. The man has gastric vertigo, headache, and neuralgic pains.

The man has evidently brought on this condition by his constant exhaustive attendance upon the brick-kilns and by his overuse of tobacco. Indeed, his symptoms are just those which we would expect to find in a case of chronic tobacco poisoning. The patient must be put upon a very careful diet of skimmed milk, from two pints up to two quarts daily, must give up his coffee and tobacco altogether, and, if possible, change his occupation, for the present, at least.

**CASE II.**—The patient was a car driver until two years ago, when he gave up that business and became a night watchman. Three or four years ago he was frequently intemperate. He also chewed a great deal at that time, and drank much coffee. His sleep was insufficient, and his work hours were from six in the morning until after twelve at night. He has suffered from much the same symptoms as *Case I.*

Nearly all cases of dyspepsia have some well-defined cause. You see at once what the cause has been in this instance. We cannot have, as physicians, too clear ideas of the action of certain substances. The baneful effects of intemperance upon the coating of the stomach

are too well known to need mention. My constant, every-day experience is proving to me that in the immoderate use of tobacco, coffee and tea, we have another most fruitful source of dyspepsia and nervous derangements. When taken into the stomach several times daily, and in large quantities, they make the nerves of the stomach more sensitive, and increase the amount of the gastric juice, rendering it much more liquid and watery in consistency, and diminishing the proportion of pepsin. They also act as sedatives to the muscular wall of the stomach, thus impairing its power of peristalsis, and producing, when absorbed, a state of nervous hyperæsthesia. Tea and coffee in particular, when taken upon an empty stomach, are exceedingly injurious. None of these three articles in overdose make people violent; but they cause just as much unhappiness as does alcohol when taken immoderately. Just as there are many grave diseases following chronic alcoholism, so the overuse of tobacco, coffee, and tea gives rise to a horrible amount of functional disturbance.

I repeat, therefore, my statement made above that very many cases of dyspepsia depend upon the excess of some particular article of diet, joined perhaps, as in the present case, with some irregularity of meals. How must such patients be treated? In the first place this man must give up absolutely his tobacco and coffee, and place himself upon a plain diet. His stomach is weak, its muscular action impaired, and its nerves over-sensitive, giving rise to reflex disturbances, such as giddiness and palpitation of the heart. Our patient must not take much food at a time into his stomach. The best diet for him will be one of skimmed milk—one half pint every four hours.

\* \* \* \* \*

Our patient comes back to us to-day, showing the excellent results of our treatment. He has given up tobacco and coffee, and has not touched a morsel of solid food since you saw him last, and has not had a single attack of pain or indigestion. Sometimes milk is not well digested, when such is the case, I generally combine lime water with it. I begin with three ounces every two hours, until as much as three pints is taken in the course of the twenty-four hours. Another sovereign article of diet is buttermilk. In buttermilk the casein of milk is coagulated and broken up, so that the stomach is spared two steps of the regular process of digestion. Still another excellent preparation of milk is koumyss. This is now made in America. It contains a good deal of carbonic acid. Milk is mixed with brewers' yeast, then corked and put on ice. Koumyss is a sparkling drink, very sedative and palatable.

Among drugs, arsenic, in small and gradually increasing doses, is a remedy of extreme importance

I have found the following prescriptions of great use in certain forms of dyspepsia:

(1.) Sodæ bicarb., three drachms; acidi hydrocyanici dil., forty-eight drops; tinct. valeriani, one ounce; syrup zingiberis, two ounces. *Misce.* Sig. a teaspoonful, thrice daily, in water.

(2.) Quiniæ sulph., sixteen grains; strychniæ sulph., one-third grain; acidi muriat. dil., one and a-half drachms; syrup zingiberis q. s. ad., four ounces. *Misce.* Sig. two teaspoonfuls in water, right after meals.

This is a case of flatulent dyspepsia, with impaired digestion and considerable accumulation of gas. There has been no coffee or tobacco poisoning in this case. The man is a sailor, forty-two years of age. For the last five months he has suffered from gastric vertigo and slight pains after eating. His bowels are costive. The epithelium of his tongue is rough and its papillæ enlarged. Bread and tea do not affect him, but anything greasy does. Last spring he was in bed seven weeks with typhoid pneumonia, and dates his dyspepsia from that time. Here you see that the dyspepsia has been brought on by a prostrating illness.

The treatment in this case is very simple, for there has been no grave error of diet which needs correcting. We must make the stomach's work lighter by placing the patient on a carefully selected diet. This is very hard to do in the case of patients in this class of life. Such patients have to take what is put before them, or nothing at all. I will tell the man, however, to avoid heavy foods, fried foods, sweets, pastry, rich pudding. His diet should consist of such articles as eggs, milk, starchy vegetables, stewed fruits, a little butter with stale bread. After meals, I would advise him to take a ten grain pepsin powder, or better still, a couple of teaspoonfuls of prescription No. 2—(see case II.)—thrice daily, after meals. I say right after meals, for we want this recipe to be taken in the acid and not in the alkaline stage of digestion. Where there is marked hepatic disturbance, the following prescription is an excellent one:

(3.) Muriat. acid. dil., one-half drachm; tinct. nuc. vomicæ, one-half drachm; comp. infus. gentianæ, q. s. ad., four ounces. *Misce.* Sig. a dessert-spoonful after meals in water.

(4.) Also the following: Bismuthi subnit., one and a-half drachms; pepsin., one and a-half drachms; strychniæ sulph., one grain; tinct. cardamomi comp. q. s. ad., four ounces. *Misce.* Sig. a teaspoonful, thrice daily, in water. If there is much flatulence, increase the amount of bismuth and pepsin; if the case is merely one of gastric atony, increase the amount of strychnia.

CASE IV.—The patient is an hostler, thirty-four years of age, and married. Has suffered

from fullness in the stomach after meals since 1865. For the last seven months has complained of severe shooting pains in the pit of his stomach. These pains extend through to his back and up to his shoulder blades. His bowels have always been costive. The pains in his stomach come on about three hours after meals. The pains are relieved temporarily by eating, but come on again with renewed vigor. Has palpitation of the heart after any excitement. Occasionally has spells of giddiness. Urine is normal.

What is the cause of this man's attacks of gastralgia? There is no gastric ulcer, for the pain is not localized, and there is no vomiting and no hematemesis. There was, no doubt, originally some subacute gastritis which passed away, leaving behind a chronic gastralgia. This gastralgia follows the ordinary law. The pain comes on at the close of digestion, because the ingesta are then acrid and fermenting. The spells of pain last as long as there is any acrid matter in the stomach. This man has, therefore, a state of slow digestion, complicated with a pure neuralgic condition of the stomach.

I find that he is at present very careful as regards his diet, but that, two or three years ago, he used a great deal of tobacco, and drank a large quantity of coffee daily. His occupation at that time was a most exposing one.

I will tell this patient to limit his diet to a gill of skimmed milk every two or three hours, at first, then a-half pint six times daily. He must also take from two to five drops of Fowler's solution when the paroxysm of pain overtakes him. Prescription No. 1—(see Case II.)—will be of great benefit to him. If the Fowler's solution does not control the pain, let him use over the epigastrium, first, a blister two inches square, then a belladonna plaster six inches square.

CASE V.—This man has dyspepsia, urticaria, and post-nasal catarrh. He is a miner, and is at work in the mines ten hours daily. He has suffered from attacks of hives for the past four years. For over a year he has had the post-nasal catarrh. There is plenty of yellow, thick phlegm in his posterior nares, his appetite is irregular, his tongue thickly coated, his bowels either very costive, or very loose, and his urine high colored.

Upon examining the man's throat I find a red, swollen mucous membrane on each side of the pharynx. The post-nasal space is filled with a purulent discharge.

Urticaria is one of the most obscure and interesting of cutaneous affections. It is generally sympathetic of some digestive or nervous derangement. The effusion under the skin is usually reabsorbed by some reflex mechanism when the source of irritation is removed. While the eruption lasts, the burning and itch-



ing are intolerable. The urticaria has brought on a state of increased sensibility of the mucous membrane of the throat, stomach, and intestines; a sort of confluent catarrh of the alimentary canal.

Treatment must be twofold—(1) The diet must be regulated. Milk is the best food. This man had better use prescription No. 3. If his bowels are costive I shall order some laxative—some sulphur with molasses, or put up with confection of orange, or given in wafers. (2) As a local application for the throat I would advise iodine, or, better, nitrate of silver. The brush by which this latter salt is applied must be so arranged that it can be touched to both of the nares separately. We must insist upon it that our patient give up his habit of constantly hawking and spitting.

[The man has now been under treatment three weeks. He has made very marked improvement in that time. His dyspepsia is all gone, and there has been no eruption of hives since you last saw him. The catarrh is gradually getting well.]

#### NOTES OF A CLINICAL LECTURE ON ACNE.

By Jonathan Hutchinson, Esq., F.R.C.S., Senior Surgeon to the London Hospital; Surgeon to the Moorfields Ophthalmic Hospital.

When the face is covered with pimples, some of which are red, some contain pus, and others show only black points in their centres—all kinds being present, and all slow in progress,—it is commonly agreed to call the condition *acne*. If the spots are angry and suppurate quickly, it is *acne pustulosa*; if they are small, very florid, and not prone to suppurate, it is *acne rosacea*; if there is great thickening about them, and again little tendency to suppurate, it is *acne tuberculata*; if there are numerous black points to be seen, it is *acne punctata*; lastly, if no one of these features be in excess of the others, it is common *acne*—*acne vulgaris*. Now, let us first understand clearly that these various adjectives do not denote different diseases, but merely different conditions of the same disease, which may be frequently met with in one and the same case. Next, we will observe that all forms of *acne* are inflammations of sebaceous follicles. I have already said that, when a follicle inflames, three results ensue—a thickening of its gland tissue, deposit and congestion of the cellular tissue around it, and accumulation of its secretion in its interior. Now, we have in *acne* all shades of variety as to these three results. Everyone is familiar with the little black dots so frequent in the skin of the face of those who have rather coarse complexions. In degree they may perhaps be found in the skins of most persons, especially about the nose. If you squeeze them, little black-headed “maggots” are ejected. These maggots, or grubs, are not living, but consist

of half-dried sebaceous matter, which had accumulated in the cavity of the gland, and which has been moulded into the pellet form in passing through the constricted opening. The black head is the end of the pellet which, having been long exposed at the mouth of the duct, has gathered soot.

It is not always that the end of the pellet gets blackened; sometimes, and especially in young persons, the mouth of the follicle is closed by a delicate membrane, and then the secretion collected beneath it is seen under its transparent covering, and remains quite white. In infants this distension of closed follicles constitute what used to be known as *strophulus albidus*; in adults it is more frequently seen on the eyelids than on other parts.

Sometimes the interior of the follicle suppurates, and, after removal of the pellet, pus escapes. This constitutes *pustular acne*.

It is a peculiar feature of the condition known as *acne*, that at one and the same time, in the same patient, you will find the follicles in all stages of disease, some simply distended and free from material irritation, others congested also, others suppurating. In this it differs much from lichen.

*Acne* is emphatically a disease of coarse skin; or rather, perhaps, we ought to say that the term “coarse skin” usually applies to integument in which the sebaceous follicles are larger than ordinary, and have gaping mouths. This causes the skin to look rough and pitted. It is a state of skin the tendency to which is often hereditary, and it is thus often seen in several members of the same family.

*Acne* spots cause more annoyance on the face than elsewhere, and hence an exaggerated impression as to their great relative frequency on this part. Although there is no doubt that the face and shoulders are their usual sites, yet, if you will examine the general surface of *acne* patients, you will very frequently find the spots, in smaller numbers, on the trunk and upper arms also.

Having asserted that all persons of coarse skin are liable to have their sebaceous follicles take on occasionally the *acne* inflammation, we may suitably ask what are the causes which induce the more severe forms of the disease. For clinical purposes we may recognise *acne* chiefly in two forms—first, the *acne* of young persons; and, second, the *acne* of those past middle life. It is in young persons that we meet chiefly with the *pustular punctate*, and *vulgaris* types, whilst in the elderly we encounter the *acne rosacea* and *tuberculata*. Respecting the *acne* of the young, there is a very widespread opinion that it is usually the result of sexual disturbance. I have no doubt that this belief is well founded to some extent, but we must beware of exaggerating it. The eruption is chiefly met with in young celibates,

whilst it is very rare under the age of puberty, and is often benefited by marriage. It is possible, however, that its comparative rarity in the married may after all be a coincidence and not a sequence, and that we ought to consider it not so much as a disease peculiar to celibacy as to the special age at which a large majority of the population are celibates. It may certainly occur before puberty. I have seen it not very infrequently in children, and once in a very marked form in the face of an infant of six months. It is also frequent in married persons of both sexes, and sometimes originates after marriage. I have known it to occur in ladies who were bearing children, and in whom the sexual functions appeared to be in perfect activity.

Making full allowance for a considerable number of acne cases in which there appears to be no sexual cause, there are yet, I think, good grounds for accepting the general belief that in a majority of instances such is the fact. The remarkable influence which the sexual functions exercise upon the general health and upon the state of the nervous system is amongst the secrets known unto all men. That they should have the power of making the sebaceous glands of the skin enlarge and suppurate is certainly, if thought about, one of the most strange. I suspect that, when it occurs, it is brought about through the agency of the nervous system rather than of the blood. Women who are not liable to acne at other times sometimes have a few spots appear at each menstrual period, and that whilst in excellent general health. I have been assured by gentlemen liable to nocturnal emissions that they invariably had an increase of acne spots after such occurrences, and sometimes so immediately that it was impossible to believe that any material change in the blood had occurred. In other cases sexual intercourse may produce the same result.

It is certainly not in cases of extreme sexual exhaustion that acne is most common. I have seen many such patients, both with and without spermatorrhœa, who had not a spot of acne but, on the contrary, had skins which were perfectly smooth—in some instances florid, in others earthy pale. It is, perhaps, rather a condition of sexual irritability than of exhaustion which produces acne. I do not think that the severity of the acne eruption bears any relation to the degree of sexual disturbance. In the worst cases that I have seen the patients often seemed to be in good health.

To dismiss this subject, we may remark that the prescriber ought, in respect to the acne of celibates, to bear in mind the possibility of a sexual cause. He will advise the adoption of measures likely to improve the general vigour, he will caution against any possible cause of debility, and he may, in some instances, suggest

matrimony as the remedy most likely to prove successful. Derangements of stomach and liver stand in about the same relation to the acne of middle-aged persons that sexual causes do to the acne of early life. Manifest dyspepsia (often the result of intemperance) is present in perhaps half the cases of acne rosacea, whilst in the other half it is exceedingly difficult to assign any cause. The same remark applies also to the indurated and tuberosus form of acne, which produces the thickened, bossy condition of skin familiarly known as "grog-blossoms," and usually considered to be proof of intemperance. In many cases such suspicion is most unjust. At any rate, of this you may be sure—that in persons congenitally of coarse skin very slight indulgence at the table may produce results in the way of acne, which would not ensue in others, whatever the amount of provocation afforded. As I asserted in reference to sexual exhaustion, so I may say here again, it is common enough to see the most intemperate escape scot-free. Nothing would be more unjust than to allow ourselves to entertain the belief in the one form of acne, that it is certainly due to sexual causes, or in the other that intemperance or gluttony is the cause. We will freely admit a frequent connection, but strongly deny that it is invariable. For the worst forms of acne of either variety you will be able to discover in the patient's state of health or antecedents no cause whatever, and you will be compelled, in considering your measures of treatment, to regard it chiefly as a local disease.

The rules for the constitutional treatment of acne patients follow easily from what we have said. If the patient be young he should be made to use a cold bath every morning, to take plenty of exercise, to live liberally as regards meat diet, with a fair allowance of stimulants; and he should be cautioned or encouraged, as the case may be, in reference to sexual matters. As to medicines, a long course of small doses of arsenic will often be of great use. If constipation be present, the habitual use of a chalybeate aperient should be prescribed. You may do all this, however, most sedulously, and gain nothing whatever, if you neglect local measures; whilst with the latter only, and without any change in the patient's habits, you may often get an acne eruption so nearly well that he will regard it gratefully as a cure. The chief local measure consists in destroying, by means of a fluid caustic, the inflamed follicles. With a fine-pointed glass brush, or a bit of soft wool cut to a point you may touch the inflamed spots from day to day. Take great care not to apply too much. In the left hand should be a roll of blotting-paper with which to absorb the fluid if it has been deposited too abundantly.

The best fluid to use is the acid nitrate of mercury. It will usually be necessary to re-

peat the touching once a week for a month or two, carefully seeking out every fresh spot. After that the patient should still see you once a month, in order that the cure may be kept up. The acid thus used does not leave larger scars than the spots would themselves do.

In acne rosacea the use of the caustic will again serve an excellent purpose. You may not only touch the spots themselves, but also pencil out the stray vessels which add so much to the patient's disfigurement. He, or more usually she, will gladly exchange a few slight and scarcely perceptible scars for the angry and very suspicious-looking redness of face which the disease causes.—*Medical Times and Gazette*.

#### THE USE OF DIGITALIS AND STRYCHNIA IN DISEASES IN WHICH DEATH TAKES PLACE BY ASTHENIA.

A Case in Illustration. By S. G. ARMOR, M.D.

The relation of local to constitutional states has long been a subject of fruitful speculation to the pathologist. To the therapist these relations are of equal interest, and may be studied, perhaps, with even greater profit. I submit the following case as a brief contribution bearing upon this point.

Miss J., a maiden lady, aged about 35 years, was attacked on the 14th of December with what seemed to be intestinal obstruction. She came under the care of Dr. Geo. K. Smith, of this city, to whom I am indebted for most of the facts of the case.

At an early period an abdominal enlargement was detected to the left of the median line. It was doughy on feel, tender on firm pressure, and disappeared after full evacuation of the bowels. The inference was that it was a faecal tumor. Following the evacuation of the bowels, the tenderness increased rather than diminished. It gradually extended, the bowels became tympanitic, pain was increased by deep inspiration, by coughing, by all bodily movements, and there was more or less elevation of temperature. The symptoms, in brief, were those of peritoneal inflammation, and the patient was at once put on opium in full and repeated doses, and the bowels kept quiet. The diet was at first mainly milk and lime-water.

December 21st, Dr. C. H. Giberson was called in consultation. Symptoms as above described. Temperature,  $102^{\circ}$ ; pulse, 112. Opium treatment continued and quinine added.

December 25th, the twelfth day after the attack, I first saw the case in consultation with Dr. Smith. I found temperature  $103\frac{1}{2}^{\circ}$ , pulse 125, with very low blood pressure; mind clear, local tenderness measurably gone, tongue moist and clean, stomach retaining nourishment well. But notwithstanding the liberal alimentation, in addition to the quinine, opium and stimulants which the patient was taking, the circulation was evidently failing.

In consultation we agreed to continue the treatment, giving the morphine hypodermically in smaller

doses, and at regular and shorter intervals, for its sustaining action on the nervous system. We added, also, to the brandy, aromatic spirits of ammonia; and agreed, in addition, to give her tablespoonful doses of the infusion of digitalis every two or three hours.

On the 27th (about twenty-four hours after commencing the digitalis, and apparently the result of it), the temperature fell to  $102^{\circ}$ , and the pulse to 100.

I saw her again on the 28th, at which time the pulse was 80, and the temperature  $101^{\circ}$ ; capillary circulation good, tongue moist; but, for the first time, patient inclines to reject both nourishment and medicine. Regarding the stomach as of vital importance in the critical condition of the patient, we decided to withhold all medicine, continuing only the stimulants, nourishment, and morphine hypodermically administered. At no time did the patient exhibit any symptoms of opium poisoning.

On the 29th, stomach better, patient retains food and well; pulse, 95; temperature,  $101\frac{1}{2}^{\circ}$ .

On the morning of Jan. 1st I was hastily summoned to see her again, and learned that during the after part of the night the temperature suddenly rose, without any apparent cause, to  $103\frac{1}{2}^{\circ}$ , and her pulse, when I saw her at nine o'clock, was 156, "thready" and uncertain. There was also general "atonic congestion" of the capillaries; the face presented a dusky hue, the skin was bathed in cold, clammy sweat, respiration was superficial and feeble, the eye dull, listless, partly closed and fixed, the mind aroused to consciousness with difficulty, and the reflex function of the spinal so greatly depressed that liquids were scarcely recognized when placed in the mouth. The patient had, in brief, the physiognomy of approaching death.

With this condition of things we administered, as a *dernier ressort*, the forty-eighth of a grain of strychnia, according to the following formula:

Strychniae sulphat., 2 grains;

Aqua destil. (warm)—1 ounce. Mix.

*Five minims contain one forty-eighth of a grain.*

This dose was repeated every two hours hypodermically during the day and following night, continuing stimulants, milk and beef-juce as the patient could be induced to swallow, supplementing deficiency of stimulants by the mouth by occasional hypodermic injections of brandy. Stimulating frictions were also applied externally, and everything was done to rouse the flagging condition of the nervous system.

Very remarkable improvement almost immediately followed. The dusky hue of the face disappeared, the eye became brighter, the mind clearer and more cognizant of surrounding objects, deglutition less difficult, the perspiration warmer, and the temperature once more came down to  $102^{\circ}$ , and the pulse from 156 to 120.

This condition of things did not last many days, however, until another class of symptoms, more alarming to the friends than the first, manifested themselves—namely, delirium, with greatly increased

sensibility of the surface and of the organs of special sense. The reflex function of the spinal cord became so exalted, that the slightest peripheral irritation produced marked disturbance of the system. Hypodermic injections had to be abandoned for a time. Sleep, however, of several hours, which the patient had not had for some days, caused the delirium to subside, and produced general quietude of the nervous system.

Jan. 3rd, patient was seen by Dr. Hesse, who advised the gradual lessening of the dose of morphine, and that muriate of quinine be administered hypodermically.

Jan. 14th, I learn from Dr. Smith that the patient continues to improve, and that the probabilities are she will make good recovery.

This case has been one of peculiar interest to me, for it involves questions of vast importance in practical medicine. The two points to which I desire to specially attract attention in this case are:

*First.* The great necessity of sustaining the heart and general nervous system in a large class of affections which terminate in death by *asthenia*.

*Second.* The manifest action of digitalis and strychnia in meeting these indications in the case reported. The improvement that followed was so rapid and unmistakable, that there could be no doubt on this point.

And their action in this case was such as I have frequently observed in similar cases.

In many cases of local inflammatory diseases (not dangerously involving vital organs) the patient often dies, I doubt not, from failure of heart action, before the local disease can run through its natural history. In all such cases time becomes an important element of cure, and the way to get such time is to guard well the "dead point of danger"—a weak, and failing heart.—*Proceedings, Medical Society Kings County, N. Y., Feb. 1878.*

#### LETTER FROM LONDON.

*To the Editors of the Louisville Medical News:*

The successful treatment of opium-poisoning by the subcutaneous injection of a grain of sulphate of atropia was the subject of a communication made to the Medical Society of London by Dr. J. Milner Fothergill, whose researches in therapeutics are not unknown to us.

The patient was a woman of forty-seven, living at a public-house, who took, at 11 a.m. on February 14th, three drachms of laudanum, representing thirteen grains or so of opium. On recovery she said she had had more. Be that as it may, she was at death's door. In half an hour she had an emetic of sulphate of zinc and ipecac., and vomited. She was then sent to the West London Hospital, where another emetic was administered, and the vomited matter still smelt of laudanum, showing that the first emetic had not got rid of all the poison. She grew worse, was walked about, but the narcosis deepened, and the respiration had nearly failed when Dr. Fothergill, on his

usual visit, arrived at the hospital at 2 p.m. He at once had a grain of atropia dissolved and injected under the skin of the forearm. His reasons for such a bold procedure were the state of the patient and his familiarity with the treatment of failing respiration from his experiments on the antagonism of aconite and digitalis, aconite and belladonna and aconite and strychnia, performed for the British Medical Association. (See the *British Medical Journal* for August 4, 1877.) In this patient the respiration was distinctly the source of danger, as the pulse was rhythmical and steady, though small. For a few (ten) minutes the failure of the respiration went on, time being required for the absorption of the belladonna.

The patient was fast losing heat, for the chemical interchanges are small when the respiration fails so markedly; so she was put into a warm bed with a hot bottle to her feet. In another ten minutes the respiration was recommencing, with five or six shallow respirations a minute and a long-drawn sigh-like respiration at intervals. At 4.30 the patient was sleeping calmly, breathing thirteen to the minute, the respirations being steady and deep. Her pulse was 132, full, but compressible. Her temperature was then only 97.5° in spite of the warm bed, the bottle, and the action of the belladonna, which raises the temperature. The heat-loss in opium-poisoning has not yet been sufficiently recognized. At 8.30 the pulse was 128, the temperature 100.4° Fahr., and the respirations twenty-four per minute. She slept deeply, but could be roused. She was rather restless at times through the night, but slept till 10 a.m. on the 15th. She was then conscious and thirsty, but did not complain of much dryness of the throat. There was no marked reddening of the skin. The pupils were natural; the recovery was complete.

This case teaches a lesson in the treatment of opium-poisoning. Dr. Fothergill's practice here was no sudden thought, but the outcome of the careful study of the mode of death in opium-poisoning given by Wood in his work on Therapeutics, and of the effects of belladonna in arresting the failing respiration in aconite-poisoning in animals. He had long worked the matter out in his mind as to what he should do if the opportunity of treating a case of opium-poisoning came before him, viz., not to give the belladonna in small, divided doses, but to give at once, as in the experiments on animals, and to take the consequences of secondary belladonna intoxication. However, in this case, no evil consequences followed, and the only mishap was a blister on each calf from the effect of the hot bottle.

It would appear that the true treatment of opium-poisoning is to empty the stomach thoroughly, and then inject a third of a grain of atropia before the breathing has markedly failed, and next to put the patient to bed, and, if necessary, inject some more atropia. If not seen until the respiration has all but stopped, a full dose of atropia should be injected at once. The contrast between the poor woman being dragged about, gradually chilling to a point incompatible with life, and lying in the bed calmly sleeping her poisons off, was very striking. The treatment of

opium-poisoning in the future will be influenced by this case. The subject of heat-loss in opium-poisoning has here been properly investigated.

Dr. Fothergill has paid great attention to the subject of physiological antagonism, and has just had awarded to him the Fothergillian gold medal of the Medical Society of London, for 1878. The subject of competition was, The Physiological Antagonism of Therapeutic Agents. In his essay he pointed out especially the potent influence of drugs upon the respiration and circulation, and their antagonism.

After showing how experiments elucidate the action of remedial agents, he went into the subject of the utility of this knowledge in actual poisoning. A still more interesting subject, he holds, is the utility of this knowledge in ordinary practice. We may use certain drugs freely, knowing their antagonists if alarming symptoms appear, as, for instance, the well-known antagonism of strychnia and chloral, some instructive cases of this antagonism being already on record. Further, by such knowledge we may get rid of and eliminate certain actions of a drug that we do not want. Thus, in the terrible night cough of some cases of phthisis, he gives a pill containing a third of a grain of morphia with one thirtieth of a grain of atropia in aloes-and-myrrh pill. The atropia prevents the sweatings and the depressant action of the morphia on the respiration and circulation. He holds, with the conclusion of Weir, Mitchell, Keen, and Morehouse, that atropia does not antagonize all the actions of opium, least affecting its effects upon the hemispheres. In this poisoning case this was well borne out, for while the pulse, the respirations, and the temperature rose, the woman slept on. From this it would appear, he holds, that in cases where large doses of morphia are indicated, much larger medicinal doses than those at present in use may be given without anxiety, if the effect of the opium upon the rhythmically discharging centers of the circulation and respiration be blocked off by combining with the morphia a full dose of atropia. He does not regard the effects upon the pupil of much importance as a guide to the action of these two agents; the state of the respiration is the true guide.

#### THE USE OF CAPSICUM WITH QUINIA.

It is not generally known that either capsicum, ginger, or other aromatics, combined with quinia, will make the patient more tolerant of large doses of this medicine, and obviate some of the disagreeable head-symptoms apt to arise from its administration, moreover, as Prof. Wm. H. Thompson has remarked, "a good dose of capsicum combined with twenty grains of quinine will act as well as thirty grains of quinine without the capsicum. Spices in general stimulate the portal circulation and promote the flow of bile, and hence their universal use in hot climates. There is a tendency on the part of quinine and capsicum to purge, and sometimes to purge violently. In such cases the purgative action is caused by the increased flow of

bile produced by the capsicum. Ginger and quinine when combined do not purge, and it makes a very good combination. The proportions should be one grain of capsicum to three of quinine; with ginger, one grain of each." In malarious climates capsicum should, if possible, be preferred, as it is in itself a good stimulant, and possesses antiperiodic properties. For years we have been in the habit of prescribing a little tincture of capsicum in an ordinary quinine-mixture, with the view of preventing any slight giddiness or headache that might otherwise arise from its administration.—*Med. Press and Circular*.

#### TO PROMOTE THE DIGESTION OF COD-LIVER OIL.

One difficulty has always been felt, and it is this: Even cod-liver oil is not always digested, and therefore something else was wanting. Dr. Balthazar Foster, of Birmingham, conceived the idea of utilizing Bernard's hint, and so combined ether with cod-liver oil. The increased flow of pancreatic juice so induced led to assimilation of the cod-liver oil, and thus another step forward was made in practical therapeutics. Another effect noticed by Dr. Foster was the return of a liking for fat under this plan of treatment, where previously a strong distaste to it had existed. One method is to give from ten to thirty drops of ether (sulphuric) in the dose of oil; or the ether may be given in water immediately before the oil. In private practice Dr. Foster prefers to give the following mixture:

|                           |                                  |
|---------------------------|----------------------------------|
| Potassæ bicarb .....      | 2 drachms.                       |
| Acidi hydrocyan. dil..... | 16 drops.                        |
| Spt. ætheris.....         | 3 drachms.                       |
| Aq. ad.....               | 8 drachms.                       |
| Misce.                    | 1 ounce <i>ter in die sumat.</i> |

This method of adding to the usefulness of a course of cod-liver oil deserves wide and general attention.—*Dr. Fothergill's Hand-book of Treatment*.

#### TREATMENT OF CHRONIC SORE THROAT.

In obstinate cases of this complaint, the local application of a saturated solution of nitrate of silver in glycerine once in ten days has been recommended.—The theory is, that an acute inflammation has a tendency to get well, whereas a chronic inflammation has no such tendency. The object is, to substitute an acute for a chronic inflammation, and the inflammation caused by nitrate of silver recovers much quicker than that caused by most of the other caustics. Then use a spray or gargle of common salt-water three or four times a day. Occasionally an antiseptic should be added, and the best is said to be oil of cinnamon, winter-green, pepper, etc. These oils all contain carbolic acid. Twenty drops of the oil of cinnamon added to a carbolic acid solution, destroys the smell and rather increases its efficacy; certainly does not detract from it.—*Medical Brief*.



# THE CANADA MEDICAL RECORD

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EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D.L.R.C.P., LOND

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MONTREAL, MAY, 1878.

## MEDICAL ALUMNI ASSOCIATION OF BISHOP'S COLLEGE.

During the past fall an association with the above name was formed in this city, when the following officers were elected: President, Dr. Wm. MacDonald, Montreal; 1st Vice-President, Dr. A. Ltour, Montreal; 2nd Vice-President, Dr. Webber, Richmond, Que.; 3rd Vice-President, Dr. Davis, New Amsterdam; British Guiana, W. I.; 4th Vice-President, Dr. Lanouette, Gentilly, Que. Council, Drs. Nelson and Slack, of Montreal; Honorary Treasurer, Dr. Hart, Bedford, Que.; Secretary, Dr. C. A. Wood, Montreal.

During the Winter Session, monthly meetings were held—open to all graduates and under-graduates of this University—when the following papers were read—Stricture of the Urethra, by Dr. C. A. Wood; Puerperal Mania, by Dr. Wolfred Nelson; Insanity, by Dr. T. E. Hayes; the Endoscope and its uses by Dr. F. W. Campbell; Diphtheria and its treatment by Dr. Donald Baynes. Pathological specimens were also exhibited by Dr. Wolfred Nelson. The meetings were well attended and very interesting, and have fully met the end for which they were intended.

## CEYLON MEDICAL SCHOOL.

The prospectus of this school has been placed in our hands. The Rules and Regulations of the Faculty seem thorough, and eminently fitted to carry out the desired end. With men of Dr. Vanderstratten's known ability, and zeal for his profession, it cannot be otherwise than a success.

## MCGILL UNIVERSITY.

The Medical Faculty of this University held its Convocation for conferring of degrees on the 30th of March. The attendance of friends was very large. Hon. Judge Day, Chancellor of the University occupied the chair. Dr. George W. Campbell, Dean of the Faculty, read the following report:—

The total number of students enregistered in

this Faculty during the past season was 161, of whom there were from Ontario, 90; Quebec, 47; Nova Scotia, 4; New Brunswick, 3; P. E. Island, 4; West Indies, 1; United States, 12.

The following gentlemen, 40 in number, have passed their Primary examinations on the following subjects: Anatomy, Chemistry, Materia Medica and Pharmacy, Institutes of Medicine and Botany and Zoology. Their names and residence are as follows: Brown, J. L., Chesterfield, O.; Burwash, Henry J., St. Andrew's, Q.; Butler, Billa F., Stirling, O.; Carman, Philip E., Iroquois, O.; Carman, John B., Iroquois, O.; Chisholm, Murdoch, Loch Lomond, N.S.; Feader, Henry C., Iroquois, O.; Gray, Thomas, Brucefield, O.; Groves, George H., Carp, O.; Gurd, David F., Montreal, Q.; Hart, George C., Osna-brook Centre, O.; Hanna, Franklin, Harlem, O.; Heard, Charles D., Charlottetown, P. E. I.; Henwood, Alfred J., Brantford, O.; Imrie, Andrew W., Spencerville, O.; Inksetter, David G., Cope-town, O.; Jackson, Joseph A., Lawrence, N. Y.; Jamieson, Charles E., Ottawa, O.; Lawford, John B., Montreal, Q.; Lefevre, John M., Toronto, O.; Lloyd, Hayes W., Strathroy, O.; Lyford, Charles C., Roscoe, Ill.; McArthur, John A., Underwood, O.; McCully, Oscar J., Sussex, N. B.; McCullough, George, St. Mary's, O.; McEachran, William, Montreal, Q.; McGuigan, William J., Stratford, O.; McNee, Stuart, Perth, O.; Menzies, John B., Almonte, O.; Scott, John G., Ottawa, O.; Seymour, Maurice M., Chesterville, O.; Shaw, William F., Ottawa, O.; Small, Henry B., Ottawa, O.; Smith, John, Torbolton, O.; Spencer, Richmond, Montreal, Q.; Smiley, Jonathan, St. Lambert, Q.; Stevenson, Hans, Wakefield, O.; Sutherland, William R., Montreal, Q.; Weagand, Clarence A., Dundas Co., O.; Williston, Hedley V., Newcastle, N.B.

The following gentlemen, 27 in number, have fulfilled all the requirements to entitle them to the degree of M.D., C.M., from this University. These exercises consist in examinations, both written and oral, on the following subjects: Principles and Practice of Surgery, Theory and Practice of Medicine, Obstetrics and Diseases of Women and Children, Medical Jurisprudence and Hygiene,—and also Clinical Examinations in Medicine and Surgery conducted at the bedside in the Hospital:—Beckstead, Morris, Grantly, O.; Bell, Robert, Montreal, Q.; Cameron, John D., Glengarry, O.; Chisholm, Alexander, Lochiel, O.;

Collison, Robert, Matilda, O.; Faulkner, Daniel W., Holloway, O.; Fortier, Louis A., Philipsburg, Q.; Fraser, John R., Hawkesbury, O.; Gardner, Henry H., Orillia, O.; Gibson, William B., Dunham, Q.; Greenwood, Fred. S., St. Catharines, O.; Guerin, James F., Montreal, Q.; Hutchinson, John A., Bluevale, O.; Howey, William H., Delhi, O.; McCann, John J., B.A., Millbury, Mass.; McCrimmon, John, Woodville, O.; McCrimmon, Milton, Ancaster, O.; McKinley, John K., Perth, O.; McNeil, Ernest, Montague, P. E. I.; Mills, Thomas W., M.A., Hamilton, O.; Neilson, William J., Perth, O.; Setree, Edward W., Prescott, O.; Smith, Daniel F., Listowell, O.; Stafford, Fred. J., Montreal, Q.; Vineberg, Hiram N., Montreal, Q.; Webster, Arthur D., Kentville, N. S.; Wright, John W., B.A., Cressey, O.

Of the above named gentlemen, Messrs. Greenwood and Gardner are under age. They have, however, passed all the examinations and fulfilled all the requirements necessary for graduation, and only await their majority to receive their degree.

A number of gentlemen also passed in Chemistry, Physiology, Materia Medica and Botany.

The Holmes Gold Medal was awarded to Hiram N. Vineberg, of Montreal.

The prize for the Final Examination was awarded to Thomas W. Mills, M.A., of Hamilton.

The prize for the Primary Examination was awarded to William R. Sutherland, Montreal.

The Sutherland Gold Medal was awarded to John M. Lefevre, Toronto.

The following gentlemen, arranged in order of merit, deserve honorable mention.

In the Primary Examination: Messrs. Lawford, J. L. Brown, Imrie, Shaw, Stevenson, Gurd, Lefevre, Gray, Williston, J. Smith, McCully and McGuigan.

In the Final Examination: Messrs. Neilson and Gibson.

#### PROFESSOR'S PRIZES.

**BOTANY.**—Rodgers and Gordon, 1st.; Carson, 2nd.

Special Prize for collection of Plants, Beaumont Small.

**PRACTICAL ANATOMY.**—**SENIOR CLASS.**—*Prize.*—JOHN B. LAWFORD.

The following gentlemen deserve honorable mention in order of merit: Lyford, Small, Im-

rie, McArthur, Grey, Stevenson, Smith, J. Sutherland, Gurd and Brown, (J. L.)

**JUNIOR CLASS.**—*Prize.*—WILLIAM L. GRAY.

Honorable mention in order of merit: Beer, Joseph, Moore, Harvie and Cormack (equal), Ross and B. E. McKenzie (equal), Rodgers, Heyd and McLain (equal), Struthers (R. B.) and Laurin (equal).

**PRACTICAL CHEMISTRY.**—*Prize.*—A. D. WEBSTER.

#### MEDICO-CHIRURGICAL SOCIETY.

MONTREAL, March 22, 1878.

A regular fortnightly meeting of the Medico-Chirurgical Society was held this evening in the library of the Natural History Society, Dr. Henry Howard, 1st Vice-President, in the chair.

Dr. OSLER exhibited a foot which had been amputated for disease of the bones of the tarsus. The patient, *æt.* 25, had had an attack of diphtheria last winter. Seven weeks ago he sat upon his foot. Dr. Osler thought he had merely suffered a sprain. The case went from bad to worse, until finally it became evident that extensive bone disease was going on. Syme's amputation was performed. All the synovial membranes in the vicinity were involved, as well as smaller bones. The case was remarkable for its rapidity, and the question was raised as to whether diphtheria had anything to do with it.

Dr. FENWICK thought that the disease had originated in a strain, and that its rapidity was due to the fact that the patient was debilitated by the attack of diphtheria. He stated, in answer to the question whether a free incision might not have saved the foot, that, according to his experience, such cases went on from bad to worse, and that amputation had to be performed some time sooner or later. Incisions about the joint would prevent the performance of Syme's amputation.

Dr. LOVERIN mentioned a case in his practice where he regretted the postponement of amputation. There was ankylosis and a most unsatisfactory result.

Dr. HAYES exhibited to the Society a cancerous mass, which had been in connection with the peritoneum and was situated behind and above the pubes. Dyspeptic symptoms with pains in the bowels had existed before death.

Dr. TRENHOLME exhibited a tumour weighing 15 lbs. formed of cysts attached to the uterus by a central mass. The organ itself being about the size of a cocoanut.

Dr. BULLER read a paper on keratotomy.

Dr. FULLER related a case of his own, bearing on the subject of Dr. Buller's paper. A piece of iron had entered the cornea and had lodged in the iris. He made an attempt at removing it, which was unsuccessful, because the anterior chamber became filled with blood. Dr. Proudfoot removed some of the iris with a view of removing the iron with it, but, not finding the iron, he and Dr. Fuller thought it expedient to keep the iridectomy wound open. In a few days the effused blood was absorbed and the iron removed with a small forceps.

Dr. PROUDFOOT said he had seen Dr. Buller's first case twice at the Montreal Dispensary. The patient when first seen had a small central ulcer of the cornea. He applied atropine, warm fomentations and a bandage. The ulcer increased rapidly, and in two days he was sent into Hospital. Dr. Proudfoot had often seen the operation done, and had on several occasions done it himself with the happiest results. He had never observed any tendency towards staphyloma of the cicatrix. Had first operated four years ago. The ulcer was large, and had crept almost all around the cornea. There was intense pain and increase of tension in the globe. Iridectomy was performed and the pain subsided for a day or two but the cornea did not improve as soon as the wound healed. He therefore performed Saemisch's operation and kept the wound open for about ten days. In that space of time, the ulcer in the cornea having closed up, the wound was allowed to heal. The result was most satisfactory, enough of the cornea remaining to form an artificial pupil. He had met with as good a result in three or four other cases. In two of them slight leucoma remained, but in no case was there staphyloma. He believed the proper treatment of ulcer of the cornea was puncture through the centre, whenever perforation threatened. A very fine needle should be used and the aqueous humour be let run off slowly; occasionally the iris might become attached to the edge of the perforation, but the attachment was small, and could always be broken up by the use of atropine.

Dr. HENRY HOWARD, as an old ophthalmic surgeon, said that keratotomy was new to him in the treatment of ulcer. He used to puncture the cornea in hypopion.

Dr. Loverin proposed, and Dr. Proudfoot seconded, a vote of thanks to the reader of the paper.

The meeting then adjourned.

RICHARD MACDONNELL, B.A., M.D.,  
*Secretary.*

MONTREAL, April 5th, 1878.

A regular meeting of the Medico-Chirurgical Society of Montreal was held this evening in the library of the Natural History Society.

The President, Dr. F. W. Campbell, took the chair. There were present: Drs. Shepherd, Henry Howard, Bell, Armstrong, Ross, Loverin, Fenwick, Parks, Proudfoot, Edwards, Nelson and Donald Baynes.

Visitors.—Dr. Black and Mr. Dunbar of Mount Forest.

The minutes of the previous meeting were read and confirmed.

Dr. TRENHOLME read a paper on "Excision of the Uterus" (this paper was published in last number.)

Dr. Ross thought that great credit was due to Dr. Trenholme for bringing forward an unsuccessful case. He asked whether bulging of the upper part of the vagina had been noticed. He looked on the fatal result as being due to hæmorrhage.

Dr. PROUDFOOT mentioned a case of ovarian tumour, where the adhesions were so strong that the operation had to be abandoned.

Dr. TRENHOLME stated that it was quite impossible to diagnose clearly the nature of abdominal tumours, until the peritoneum had been opened. The vagina did not bulge at all.

A vote of thanks to Dr. Trenholme was moved by Dr. Howard, and seconded by Dr. Loverin.

Dr. TRENHOLME related a case of acute hydrocephalus, in which he had punctured the meninges. This case was published in last number.

Dr. F. W. CAMPBELL introduced the question "was chloral a safe remedy always in delirium tremens."

Dr. HENRY HOWARD considers chloral to be dangerous in all cases of delirium where fright is a prominent symptom.

Dr. Ross drew the attention of the Society to

the fact, that in cases where delirium tremens complicated rheumatism and pneumonia, there was a tendency towards sudden death.

Dr. PROUDFOOT has given 60 grains of chloral every hour for five hours, without producing an effect. The patient was suffering from delirium tremens.

It was moved by Dr. PROUDFOOT, seconded by Dr. FENWICK:—

I. "That the Medico-Chirurgical Society of Montreal desires to place upon record the very high estimation in which they held the late Dr. John Bell, whose sudden death occurred under circumstances so peculiarly sad in their nature.

II. "That by the death of Dr. Bell the Medico-Chirurgical Society has lost one of its most active members, who, for two years, had acted as secretary, to the great satisfaction of its members.

III. "That his sudden death at comparatively an early age has cast a gloom among his numerous professional friends and associates, all of whom feel that, had he lived, a bright future was before him."

The meeting adjourned.

RICHARD MACDONNELL, B.A., M.D.,  
*Secretary.*

#### PERSONAL.

W. B. Malloch (M.D., C.M., McGill College, 1867,) will shortly return to Canada after nearly ten years service as surgeon to the Hudson Bay Company at Moose Factory, N. W. T.

Richard Markell, (M.D., C.M., McGill College, 1867) who went out to California three years ago on account of delicate health, has quite recovered, and is practising very successfully at Cacheville, Yolo Co., Cal.

Matthew Gardner (M.D., C.M., McGill College, 1871) has settled in Davisville, California.

Dr. J. W. McDuffee of Stanstead, after six months regular attendance at the Medical Faculty of Bishop's College (in compliance with the By-laws of the College P. and S. of Quebec) has returned to his home, and resumed practice. We understand he has been warmly welcomed back by his patients.

Dr. Valmore St. Germain, (M.D., Bishop's College, 1874,) has settled in St. Norbert de Arthabaskaville.

Dr. C. W. Covernton, of Simcoe, has removed to Toronto.

Dr. McDonald, of Guelph, has removed to Toronto, occupying the premises of the late Dr. Hodder.

Dr. A. M. Ross, of Toronto, has settled in Montreal, as a Consulting Physician.

Dr. R. A. Kennedy and Dr. Wolfred Nelson have resigned their appointments as Attending Physicians to the Montreal Dispensary. They have both been elected members of the Consulting Staff. Dr. Richard MacDonnell and Dr. F. J. Shepperd have been elected Attending Physicians to the Montreal Dispensary in place of Drs. Kennedy and Nelson resigned.

Dr. Oliver C. Edwards has been elected an Attending Physician to the Montreal Dispensary in place of the late Dr. Bell.

Dr. Stevenson, of Iroquois, has removed to Montreal, and commenced practice.

Dr. Slack, formerly House Surgeon at Charing Cross Hospital, London, England, has been appointed Professor of Surgery in Bishop's College Faculty of Medicine,

Dr. Kennedy has been appointed Professor of Midwifery in Bishop's College Faculty of Medicine.

Dr. George E. Armstrong has been appointed Lecturer on Anatomy in Bishop's College Faculty of Medicine.

Dr. Ritchie (M.D., McGill College, 187) has returned to Montreal, after a lengthened absence in Europe.

Dr. Guerin (M.D., McGill College, 1878) has settled in Montreal.

Dr. Fuller, of Montreal, has removed to Grand Rapids, Michigan, where he proposes to enter into practice. He leaves our city, where he had achieved an excellent professional position, carrying with him the heartiest good wishes of the entire profession for his future welfare and success.

Dr. Belle (M.D., Bishop's College, 1878) is at present in Paris, attending the Hospital St. Louis.

#### MEDICAL NEWS.

The Toronto Physicians are about to organize a Medical Society; a preliminary meeting has been held.—A new Journal called "Brain," edited by Crichton Browne and Hughlings Jackson, and several others, is about to be published by MacMillan of London.—There are 305 students up for examination in Toronto before the Ontario Medical Board, of this number 89 are finals.

#### BIRTHS.

In Montreal, on the 5th of April, the wife of W. R. Hingson, M.D., of a son.

In Ottawa, on the 4th of April, the wife of Dr. Sweetland of a son.

#### DIED.

In Belleville, on the 23rd of March, James Lister, M.D., aged 65 years.

In Montreal, on the 23rd of March, Dr. A. A. Duhamel in his 38th year.

## Pharmaceutical Department.

A. H. KOLLMYER, M.A., M.D., Editor.

### PHARMACEUTICAL ASSOCIATION EXAMINATIONS.

At the annual examinations of the Pharmaceutical Association of the Province of Quebec, held in this city, in the rooms of the Association, on the 25th and 26th of April last, the following candidates obtained the requisite marks to entitle them to be placed on the Register of the Association, those for the "Major" Examination being entitled to receive the Diploma and Licence of the Association, qualifying them to practice Pharmacy in this Province, the "Minor" candidates receiving certificates duly qualifying them to occupy the position of Druggists' assistants. The successful candidates are here named in the order of merit, namely:—For "Major" Examination,—Frederick Morris, J. R. Wright, Andrew Henderson, Joseph Seguin, T. M. Henderson, F. F. Gauvreau, Joseph Goulden. For the "Minor" Examination:—Wm. S. Kerry, W. A. Farwell, J. E. Wright, J. Sutherland, Joseph Seguin, A. Henderson, R. S. Chesnut, E. E. Hepburn, W. J. B. Brunet, J. H. M. Harte, James Christie.

One applicant for the "Major" and two for the "Minor" Examinations were referred back for further study.

### PHARMACEUTICAL NOTES.

By H. R. GRAY, MONTREAL.

The late George Cruikshank regularly attended the annual conversations of the Pharmaceutical Society of London.

The Pharmacists of Montreal have among their number, one Bell Gold Medallist, one ex-president of the Pharmaceutical Society of London, one ex-member of the Board of Examiners of the same society, besides several Pharmaceutical Chemists and Licentiates, all of whom graduated at Bloomsbury Square.

The Pharmaceutical Society of Melbourne, Australia, has arranged to present each of its members monthly, with a copy of the *Chemist and Druggist* of London, to be bound up with a supplement to be published in the Colony.

HYDRATED OIL is the latest thing for consumption and wasting diseases, and as Dr. Overend Drewry, of the Dispensary for Diseases of the Chest, Great Gower St., London, says in a pamphlet on the subject, for those "who insensibly are drifting towards degeneration of nerve tissue." It is composed of oil, water, pancreatin, soda, boric acid and hyocholic

acid. A firm in London is already making a specialty of it. The formula of hyocholic acid is  $C_{25}H_{40}O_4$ . The hydrated oil is easily digested, and its use is quickly followed by increase in weight. The usual dose is a dessert-spoonful 3 times a day. When phosphorus is indicated, it should not be given with the oil. It is better to give the phosphorus at different hours.

In Bengal they have 1,900 acres devoted to cinchona cultivation, yielding annually 366,000 lbs. of dry succi-rubra bark.

Dr. Selly, of Madrid, in a communication to Dr. Julius Althaus, who writes to the *British Medical Journal* on the subject of repeating prescriptions, says he has found many English travellers come to him with a pocketful of receipts from London physicians, and a plan of treatment laid down sufficient to last them a lifetime, and he thinks the members of the medical profession are as much to blame in this matter as the patients or pharmacists.

The retail price of dried vipers, according to an old supplement to the *Pharmacopœia*, published in London, was one shilling per ounce. Quinine, in more recent editions of the same supplement, is quoted at £3 sterling per ounce; bicarbonate of soda, 7s. per lb.

The first "Pharmacopœia" published in May, 1618, and distributed to the apothecaries by the London College of Physicians, was so full of errors, that it was found necessary to call in the whole edition. A fact not to be wondered at when we take into consideration the frivolous and complicated nature of some of the popular remedies of that day. Methridatium Damocratis, the Methridate (or electuary) of Damocrates, contained fifty-one different ingredients.

According to L. Sonnenschein, ceric oxide is the best re-agent for strychnine. The alkaloid being covered with concentrated sulphuric acid, and a small quantity of the sesquioxide of cerium being stirred in, the fine purple color which is obtained with bichromate of potash is instantly developed. It is asserted that this re-action detects the one-millionth part of a grain of strychnine.

It would appear that Persian opium is likely to become an important competitor with "Turkey Seconds." The growth from Northern Persia is improving every year, and from some parcels a yield of morphia has been obtained equal to that from "fine Turkey." In Persian opium the whole parcel is invariably uniform in quality, while no two pieces of "Turkey Seconds" are equal.

Ergotine as found in pharmacies is simply a watery extract of ergot. But the name has been also applied to another and very different preparation, made by exhausting powdered ergot with rectified ether, filtering the solution thus obtained, and the ether withdrawn by distillation, when a peculiar oily substance remains, which is supposed by some to be the active



principle, whilst others consider it to be a poisonous constituent. Experience shows, however, that a well made watery extract possesses all the medicinal properties of fresh ergot.

#### NOTES ON THYMOL.

BY H. R. GRAY, MONTREAL.

Thymol, or thymic acid, has recently attracted attention as an antiseptic and disinfectant. It is obtained from the essential oils of common garden thyme, *Thymus Vulgaris*; ajowan fruit, *ptychotis ajowan*; American horsemint, *monarda punctata*; and probably other plants. So far, the essential oil of thyme is the only source from which thymol is procured by chemical manufacturers.

Thymol is a crystalline, colorless body, formula  $C_{10}H_{14}O$ , with an odor resembling oil of thyme, and a burning aromatic taste. It dissolves readily in alcohol, ether, bisulphide of carbon, chloroform, fixed oils, glacial acetic acid and vaseline. It is soluble in water in the proportion of 1 in 1000. It is analogous with carbolic and cresylic acids and creosote, and isomeric with cuminic acid and carvol.

Thymol may be readily prepared by treating the volatile oil with an equal volume of a 20 per cent. solution of caustic soda, and neutralizing it with hydrochloric acid, when the thymol will rise to the surface in transparent rhomboidal plates. It can also be made by exposing the oil to prolonged refrigeration, under the influence of which the thymol readily crystallizes and floats on the surface. Wood states that there are two isomeric forms of thymic acid,—one crystalline, and the other liquid. The latter, however, is not obtainable commercially, consequently the crystalline is the kind which has, so far, been experimented with. Bouilhon, a French pharmacist of Lille, first suggested its use, to deodorize unhealthy wounds, to Dr. Paquet of that city, who states, as the result of his experiments, that thymol is adapted to all those purposes to which carbolic acid has been hitherto applied as a disinfectant and deodorizer. Lewin reports that thymol has greater power than either carbolic or salicylic acids in arresting fermentation in solutions containing sugar. It undoubtedly retards the coagulation of milk, and, in a concentrated state, its caustic properties are sufficiently powerful to destroy the dental nerves. Several German surgeons consider it much more powerful, under certain circumstances, than carbolic acid, while its pleasant odor on dressings is a decided advantage with sensitive patients.

Mr. Gerard, member of the Pharmaceutical Society of Great Britain, Pharmacist to the University College Hospital, London, has worked out the following formula, approved by Dr. Crocker, of the same Institution, who has instituted a series of experiments, and who has already had much success with this new anti-

septic, especially in skin diseases:—Two grains in one ounce of spt. vini rect. is miscible with water in any proportion. A solution of 7 grains of caustic potash in  $1\frac{1}{2}$  drams of water will take up 15 grains of thymol.

#### LOTION.

R Thymol..... grs. v.  
Spts. vini rect.  
Glycerine, of each....  $\frac{3}{4}$  j.  
Aqua distil. ad.....  $\frac{3}{4}$  viij.

#### OINTMENT.

R Thymol ..... grs. v to xx  
Vaseline.....  $\frac{3}{4}$  j.

When required stronger than 20 grains to the ounce, it is better to dissolve the thymol previously in alcohol.

Dr. Crocker has not as yet had occasion to use stronger lotions than the above.

Professor Volkmann, of Halle, has substituted thymol for carbolic acid in the antiseptic treatment of surgical cases by Professor Lister.

#### FOR THE SPRAY SOLUTION.

R Thymol..... 1 part.  
Alcohol ..... 10 "  
Glycerine ..... 20 "  
Aqua distil ..... 1000 "

#### FOR THE GAUZE DRESSINGS.

R Spermaceti ..... 500 parts.  
Resin ..... 50 "  
Thymol..... 16 "

A form for pills prescribed by a London physician is as follows:—

R Thymol ..... grs. iiij.  
Sapo Castil..... grs. viij.  
Conf. rosæ ..... 3 ss.  
Mx. et divid. in pil. xx.

One three times a day, followed each time by a draught of milk.

In France, it is used in the hospitals according to the following formula:—

R Thymol..... 1 part.  
Alcohol..... 4 "  
Aqua..... 995 "

#### ERYTHROXYLON COCA.

BY DONALD BAYNES, M.A., M.D., MONTREAL.

This plant belongs to the order *Erythroxylaceæ* (sapindales). There are several species, some of them yielding useful products, as for example:—*Erythroxylon suberosum*, from which is obtained a brownish dye. The young branches and leaves of the *Erythroxylon areolatum* are said to be cooling, and when mixed with benne oil form a refreshing liniment for the head. The bark is also used as a tonic. (Ainslie ii. 422.) The bark of the *Erythroxylon anguifugum* is thought to be an antidote against snake-bites in Brazil, and that the *Erythroxylon campestre* is employed in the same country as a purgative. (Martin's Mat. Med. Bras.)

But the *Erythroxylon coca*, so called from the Indian "Khoka," signifying a tree or plant, is by

far the most important plant of the order. It is a shrub from 5 to 10 feet in height. The leaves are a delicate bright green, lighter on the under surface, usually smooth, alternate, from one to three inches in length. The distinguishing characteristic of the leaf is, however, two arched lines, one on either side of the midrib, which meet at each extremity; these marks or lines are caused by the folding of the leaf in the bud. The flowers are small, whitish or greenish, and the fruit is a one-seeded, oblong berry about the size of a pea. This plant is found wild, and is cultivated in several of the South American States, notably in Peru, Bolivia, Ecuador, Brazil, etc. The leaves are the part used, either chewed or taken in the form of infusion as tea. The gathering, curing and packing requires great care, as they lose their active properties when bruised. When dry they are packed in parcels of about 24 pounds weight, and are worth about 25c. a pound. The Indians, the chief consumers of this drug, formerly held it in superstitious reverence, calling it the divine plant, and consider it as a sort of sanctuary of their God; they put the leaves in the mouth of the dead as a propitiatory offering. Formerly it was only used by the kings, priests, and those whose virtues or actions in war, or otherwise, rendered them worthy to be thus rewarded. By degrees, however, this plant came into general use, and is now the chief stimulant and narcotic of the Indian, and one much used by him. Like tobacco and alcohol, it may be, and indeed is, useful and healthful in moderation, but very disastrous in its effects when taken in excess. Those who use the coca generally chew the leaves, rolling them up in a ball, and adding a little quick lime or wood ash to them, by means of a slip of wood or needle carried for the purpose. This addition brings out the taste, strength and flavor to a greater extent. The chewing is speedily followed by a copious supply of greenish saliva, part of which is swallowed and part ejected. When one lot of leaves is exhausted, a fresh ball is prepared. The Indian lies down, or rests in some other way, during this process of chewing, which usually lasts from ten minutes to half an hour, according to the quantity of work to be done, or the amount of fatigue undergone; his period of rest is taken two or three times a day. After finishing the chewing the Indian gets up, lights a cigarette and returns to his labor, strengthened and refreshed. An Indian chews about an ounce of leaves in the 24 hours. There is no doubt that this plant, used in moderation, is most useful in enabling a person to endure prolonged exertion, fatigue, hunger, and cold; many would perish on the march across the Andes were it not for this drug. Like everything else, the use of coca may be abused, and in that case has very disastrous results, and, curious to say, the abuse is generally seen among the whites (if so you may call the swarthy Brazilian, Bolivian, or Peruvian, etc.). As it is an Indian habit, it is not considered genteel, so that the Bolivian or Peruvian gentleman is ashamed to indulge in it before others, he therefore retires to

his room and chews his coca in solitude. If the habit grows upon him, and he gives himself up to excess, he retires for days to the woods, and chews his beloved drug. He is now considered as lost by his friends, and is looked upon as an irreclaimable drunkard is with us; any one giving up in this way to the habit soon leaves the towns and societies of civilized men, and betakes himself to the woods and Indian villages, there to drag out the remainder of his miserable existence. He is called a "coquero," and becomes an object of contempt and loathing to his friends. The result of chewing to excess is an abominable breath, pale lips, yellow skin, sunken eye, an unsteady gait, distressing dyspepsia, and, eventually, dropsical swellings, boils and death. On the other hand when taken moderately it is harmless, and even conducive to health, especially to those living in want and exposure. Coca chewers are usually very long-lived. Coca has two very important properties: 1st. It lessens the necessity for food, and gives great endurance in fatigue. The Indian toils day after day in the tropical sun, or carries heavy burdens long distances, having only a handful or so of maize as food; he however works well, and is cheerful, if he be not deprived of his coca. In fact, it may almost be made a substitute for food. 2nd. The leaf, either chewed, or taken as an infusion, prevents the difficulty of respiration felt in ascending the Andes. This fact has led to its trial in some forms of chest complaints. It has been tried with much benefit in emphysema, pulmonary oedema, in the dyspnoea of functional heart disease, asthma, consumption, various forms of dyspepsia, etc., etc.

Though it is true that all writers, and all those who have either used the drug, or seen it used in its native clime, abundantly testify to its wonderful powers in assisting respiration while crossing the Andes, etc., in supporting and sustaining the vital powers while undergoing severe and protracted exposure and labor without sufficient food or rest, yet experiments tried in England and elsewhere go to prove that the wonderful powers attributed to it are nearly all, if not entirely, wanting. Weston, the pedestrian, in a letter to the *Lancet*, states that in his case it was worse than useless, and, in fact, attributes to trying it a fit of vertigo which seized him during one of his feats.

Mr. Dowdswell made some very extended experiments with it at the laboratory of the University of London, and concludes that his results are at the best negative. On the other hand, some claim to have seen benefit follow its use. One gentleman, in a letter to the *Lancet*, although disclaiming any benefit from its use in increasing his powers of endurance, states that it had a wonderful action on his nervous system. It seems this gentleman was extremely nervous while shooting, and usually missed his bird, however, after taking the coca his nervous system seemed so fortified that his game bag, instead of remaining empty as usual, was soon well stocked. Now how can these discrepancies be explained, that in Peru, Bolivia, etc., the results are so marvellous,

while in England and other places they are, at best, but slight and generally negative.

The following two causes will, I think, account for the difference:

1st. That the Peruvians and other tribes keep the best leaves for themselves, and export the inferior ones, as is well known the Chinese do in the exportation of tea.

2nd. That the sea air must in some way affect its efficacy, as it is supposed to do in the case of the *canabis indica*, the value of which in tetanus is strikingly impaired.

To get the full benefit of the coca leaf in Europe or here I should be inclined to advise that an extract should be made of the leaves on the plantations, this, at any rate, would insure against any effect the sea air might have.

I will conclude this paper by giving some instances where in Brazil and Bolivia I have known benefit to follow the use of this plant.

It to a great extent replaces food. The Indian will take long journeys, carrying heavy loads, with nothing but a little maize and his coca leaves in his pouch. It acts as a stimulant, like alcohol, but is more lasting in its effects, and is not followed by depression. It is useful as a tonic, and may be employed when quinine and bark disagree with the stomach; it is very useful in convalescence after exhausting diseases; it is a powerful restorer of the vital forces; it has given much satisfaction as a curative in many forms of dyspepsia. It is said to have a special action on the vocal cords, strengthening the voice while singing. It is much used, and with great benefit, in various pulmonary affections, dyspnoea, etc.

**QUERIES AND ANSWERS.**—J. A. N. writes,—Would you kindly inform me of an unobjectionable anti-ferment for Hive Syrup, made according to the United States Dispensatory? I find great difficulty, he adds, in keeping it through the summer months, even in a cold cellar.

(M. Henri Lajoux asserts that the addition of salicylic acid in the proportion of one-tenth of one per cent. of the sugar contained in the Syrup will prevent its fermenting.)

**RECENT EXPERIMENTS WITH ALCOHOL.**—Prof. Binz, of Bonn, and some of his assistants, have recently re-examined the question of excretion of alcohol by the kidneys and lungs, using Geissler's vaporimeter for the detection of traces of alcohol. This instrument will allow of the detection of as little as 0.05 per cent. alcohol. They found that patients suffering from various febrile disorders, excreted by the kidneys during the eight or nine hours after doses of alcohol had been given not more than 3.1 per cent. of the total quantity, and in some cases no alcohol could be found. It also appears from these experiments that, practically, no alcohol escapes by the breath, even when large quantities

are taken, and hence it is concluded that by far the larger part of the alcohol is burnt up in the body in the processes of metamorphosis of the tissues. This is, of course, a well known fact, but its confirmation at this time is not inopportune.

**COTO BARK.**—In respect to this bark, which appears to be exciting some interest, a pertinent remark appeared in a recent number of the *Pharmaceutische Zeitung*. According to our contemporary, the "coto bark," originally examined by Jobst, and from which he isolated cotoin, is not met with in commerce, and the bark which came into the market last year under that name was exclusively "paracoto bark." If this be correct, it follows that the "cotoin" of some price lists must be represented by para-cotoin, which, as stated by Jobst, even when freed as much as possible from leucotin and other bodies accompanying it in the bark, is inferior in its anti-diarrhoeic action to the true cotoin.

**PHOSPHIDE OF ZINC**, in a granule of from one to two fifteenths of a grain, thrice daily, seems to have proved an effectual remedy for hysteria, in the hands of Dr. Gross.

**IODOFORM.**—Dr. Wyndham Cottle recommends the use of iodoform as a parasiticide, and for indolent and syphilitic ulcers and wounds, in the form of ointment of twenty grains to an ounce of lard. Dr. Lennox Browne recommends a solution in the proportion of one part of iodoform to ten or twelve of ether for local application in post-nasal catarrh.

**IODIDE OF ETHYL.**—This preparation has recently been employed by Prof. Lee as an inhalation in asthma, and is reported to relieve the paroxysms of difficulty of breathing very rapidly.

**THE ACTION OF GLYCERINE.**—Dr. A. Catillon has been investigating the influence of moderate doses of glycerine on the animal economy. He found that half a gramme of glycerine per diem caused an increase of one-tenth to one-fifth in body-weight in guinea pigs. Experiments on himself and on dogs proved that this increase was due, in part, to the formation of fat, and in part to diminished destruction of nitrogenized tissue. Some time ago Drs. Dujardin, Beaumetz and Andryé proved that the subcutaneous injection of eight or ten grammes of glycerine per kilogramme of body weight would kill a dog in twenty-four hours.—*Chemist and Druggist*.)

**LOCUST OIL.**—Analysis and examination of the dead Rocky Mountain locusts by the United States Entomological Commission show that these insects furnish a new oil which will be christened *caloptine*, and a very large percentage of pure formic acid. Though this acid exists in the ant and some other insects, it is with difficulty obtained in large quantities; whereas by the action of sulphuric acid upon the locust juices, it passes off with great readiness, and in remarkable quantity and gravity. The various uses of this acid as a therapeutic, etc., are capable of great and valuable extension, where it can be obtained so readily and in such quantity. (*Druggists' Circular*.)

## Original Communications.

*Comminuted Fracture of left Elbow, previously Anchylosed, resulting in Gangrene of Arm. Amputation. Recovery.* By A. ANSELL, M.D., of Falmouth, Jamaica.

Francisco Aguilero, a Mexican, laborer, ætatis 48, of intemperate habits, slender stature, previous health good, was admitted to surgical ward of St. Mary's Hospital, San Antonio, Texas, on the 17th September, 1873, under charge of surgeon A. Ansell. On admission his condition was as follows: Left arm exceedingly tumefied from elbow to shoulder, of a dark brown hue, *vesicated* throughout its entire extent, tense, hot and painful; countenance anxious, desirous of having "something done for him," tongue coated, bowels constipated, urine scanty, high colored; pulse, 120; thermometer, 101 F.; respirations, 30. Gave the following

### HISTORY.

About seventeen days ago was thrown from off the top of a load of wood (which he was conveying in a cart) to the ground, and fell striking full upon his elbow; the joint had been fractured thirteen years before, from a similar cause; he had had no medical attention, being poor, could not afford to send for a doctor, but had had the limb adjusted to a board, and had applied lead water, fever having supervened, and the pain in the limb becoming so intense he determined to seek medical aid. Coming to town he was admitted as an inmate to the pauper hospital. He judges the height from which he fell to be from ten to twelve feet.

In consultation with George Cuppels, Esq., M.D., M.R.C.S.E., it was decided, in view of the gangrenous condition of the limb, and the inroad the disease was making on the patient's constitution, to amputate at the shoulder joint, without delay. The necessary means being in readiness, I proceeded to disarticulate by the method of Baron Larny, by making a straight incision from the acromion process down to insertion of deltoid, then two other incisions, either at right angles from the first: then opening up the capsule of the joint, released the head of the humerus from the glenoid cavity of the scapula; next passing a catline behind the humerus, severed the soft parts, at same time seizing the flap in such a manner as to control the axillary artery, which was soon ligated, as well as two smaller vessels, a smaller branch or so were twisted. In consequence of an insufficiency of assistance, there

was no possibility of controlling the subclavian artery, the result was, there was considerable hæmorrhage. The anæsthetic used was "Squibb's" chloroform. At the completion of the operation, but prior to applying the sutures, it was discovered the patient was narcotized, but a powerful galvanic battery being at hand, it was applied, and with the usual proceeding in such cases the man was restored in about an hour, though reaction was slow. Patient was removed to his bed, where hot bricks and bottles of hot water were applied, and half an ounce of brandy with egg administered every half hour for nine hours; the patient remained with a pulse hardly perceptible, with respiration slow, accompanied with sighing, but by assiduously keeping up stimulation and ammonia, at the end of the period just named, reaction was fully established. 18th.—Flap united by eight silver wire sutures, and wound dressed with carbolic oil (1 to 40) applied on cotton batting. 19th.—Patient arose from his bed, feeling well enough and strong enough to occupy a chair outside the ward, and only occupied the bed to sleep in at night. The case progresses favorably, the ligatures being thrown off about the 18th day; three-fourths of the wound united by primary intention firmly by the fifth day after the operation, and the man was discharged well on the 23rd day, or October 10th.

The specimen preserved of this case, contains much instruction; first, it should be remarked, that a dissection of the limb after amputation revealed an amount of disorganization showing that another line of treatment, tending in a conservative direction, would undoubtedly have ended in the death of the patient; the soft parts were infiltrated throughout the entire length of arm and forearm, the flaps even were of dubious appearance, but chloride of zinc and alcohol, and the carbolic dressing restored them to a healthy condition; pus was seen throughout the limb at various points, even in the vessels. The bones accompanying this history bears evidence of an extensive fracture having taken place many years previously (patient states 13); they evidence the absorption and obliteration of the condyles of the humerus, the round head of the radius, the olecranon process, and part of the ulna, while a solidification of the entire articular surface shows how extensive must have been the previous injury. The subsequent injury was none the less extensive, the loss of bone substance shows that the fracture was comminuted, while by a survey part of the bone is seen to have been driven into the cancellus

structure. Some of these fragments, in our opinion, acted as an impediment to the circulation, hence the gangrenous condition, resulting in the subsequent amputation.

It was thought advisable to treat this case expectantly, and therefore he took daily 15 grains of quinine with 30 grains of chlorate of potash for seven or eight days.

*Notes of case of Caries of the Rib.* By A. ANSELL, M.D., Falmouth, Jamaica.

*Result—Cured.*

Zeferina Cortes, ætat. 5½ years; nativity, Mexico; family history evidenced marked syphilis; the child was of the diathesis syphilo-scorfulous; her appearance was extremely emaciated, and bore evidence of neglected care.

I was consulted for a large abscess which had formed over the anterior costal region, covering the ribs from the fourth to the seventh; there was slight fluctuation clearly discernible over the sternal end of the sixth rib, and extending back for about 1½ inches; the fluid, however, was deep. The child was fretful, and was in apparent pain; she could not bear the part touched, flinching at the slightest touch. I was told she had had severe fever for several days; the tongue was thickly coated, the pulse soft, but full, compressible, complete anorexia; bowels inclined to be too solvent; the child's condition was generally æsthenic.

My first act was to give exit to contained fluid. I therefore made a free incision, in the doing of which my bistoury came in contact with a hard substance. Not knowing what this might be, I ænesthetised the child, and examined the cavity carefully; this resulted in the extraction of the sternal end of the sixth rib, following which there was a considerable exudation of dark fetid pus, the characteristic pus of dead bone. I injected the cavity with a weak carbolic acid solution; this with the double purpose of deodorising the wound, and assisting in the exfoliation of the end of the bone.

My internal treatment of this case was by the syrup of triple phosphates, of iron, quinine and strychnia. The case progressed favorably and terminated successfully. It was under my care from the 11th of June, until the 4th of August, 1874.

**DEODORIZED IODOFORM.** Dissolve iodoform in ether and apply to the diseased parts. On evaporation an odorless coating of iodoform is left.—(*Druggists' Circular.*)

## Progress of Medical Science.

### ON THE TREATMENT OF CHRONIC THROAT-CATARRH WITH NITRATE OF SILVER.

Dr. Dawosky lays down the proposition (*Betz's Memorabilien*, vol. xxii, part 12) that in the treatment of diseases of mucous membranes, where external applications are possible, nitrate of silver is a remedy useful before all others. Brought into contact with a mucous surface, it coagulates the mucus; and if applied in excess it unites chemically with the tissue of the membrane beneath, forming a more or less thick crust. If the nitrate be applied to an actively secreting mucous membrane, it first irritates the distended blood vessels and capillaries, and also stimulates their contractility, so that they unload themselves and cause an onward flow of the blood accumulated in them. Hence it becomes necessary to the efficient use of nitrate of silver to form an accurate estimate of the quantity to be applied in each case, and also that it should be applied by the physician himself. In chronic throat catarrh, we have a congested condition of the mucous membrane, and a consequent abundant secretion, with swelling and redness occurring in unequally distributed patches. If these patches become denuded of epithelium, they appear yet more deeply reddened. In such cases, the nitrate should not be applied otherwise than in a solution of definite strength. It is convenient to have a concentrated solution, which may then be diluted with water or glycerine. After applying it with a brush to the affected parts, these should be painted over with a solution of glycerine, and the application is repeated so long as there is any swelling, unhealthy secretion, etc. At the same time, the food and drink taken should be cold, and smoking discontinued. Should the larynx be also affected, it should be brushed with the caustic solution of a strength of one to eight, repeated three or four times a day. A large number of cases of laryngeal catarrh thus treated have uniformly yielded the best results.

### LIQUOR BISMUTHI FOR NASAL CATARRH.

Dr. Q. C. Smith writes to the *Pacific Med. and S. J.* recommending for nasal catarrh liquor bismuthi and water, equal parts, applied one to three times a day, to nostrils, pharynx and naso-pharyngeal cavity, freely, with a spray producer. He has found this, during an experience of several months, to produce very satisfactory results. Sulpho-carbolate of zinc, in weak solution, as before published, he regards also as a very efficient remedy; applied in the same manner.



## LECTURE ON ABSCESS IN THE NEIGHBORHOOD OF THE ANUS AND RECTUM.

By W. H. VAN BUREN, M.D.,

Professor of Surgery in Belleville Hospital Medical College.

(Delivered at the College in the Spring Course, April, 1878.)

Abscess in the neighborhood of the rectum and anus is a very common affection, although it is often borne in silence, especially by women, through dislike of exposure and dread of the surgeon's knife. The practitioner who is familiar with the different phases of the disease has it in his power to prevent great inconvenience and suffering, and not unfrequently even to save life. Recognizing it by the description of characteristic symptoms, he can often say confidently to his patient, "Take a little ether and let me save you much trouble hereafter." There is no class of cases in which anæsthesia adds so largely to our power as in the surgery of the rectum; and here, in this country, where it was first discovered, the duty would seem to devolve upon us to demonstrate its practical utility in everyday surgery, for abroad, and especially on the Continent, the tendency is very strong to continue in the beaten track, and reserve it for the greater operations.

I shall assume that you know something of the general pathology of abscess. Here, as elsewhere, it takes its origin in the alteration or actual death of a portion of tissue, possibly very minute, which thus becomes a source of irritation sufficient to provoke an effort for its elimination or floating out from the organism by pus formation. This necrosis or change in quality of tissue—the ultimate cause of every abscess not due to the presence of an actual foreign body introduced into the tissues from without—may originate in *local traumatism*, or in *failure of local textural nutrition from general causes*. Thus, in answer to the question why abscesses should form in this region, we find amongst clearly substantiated antecedents the following: Perforation, immediate or ulcerative, by hard substances which have been swallowed and afterwards actually found in abscesses near the rectum, *e.g.*, pins, needles, fish-bones, sharp fragments of chicken and other bones—the pelvis of a snipe, an apple core, etc.; abrasions caused by impacted and hardened feces, or by foreign bodies introduced through the anus, leading in some instances to perforating ulcer; violent stretching of the parts in forced efforts at defecation; contusions, as from kicks, or riding on horseback; mechanical or chemical irritation by contact of substances used for cleanliness, by scratching to relieve pruritus or eczema, or by the contact of strong perspiration after much walking, or of acrid secretions from the vagina; strangulated or irritated hæmorrhoids; the presence of stricture or cancer of the gut—of which the formation of abscess in the neighborhood is not an unfrequent complication; local chilling, as by sitting on a cold stone or a wet seat; finally, the tubercular diathesis, and also, in persons of good constitution, a temporarily vitiated condition of the

blood and consequent depression of the vital powers.

We must not lose sight of the facts that chronic abscess of remote origin in necrosis of bone, and psoas abscess, sometimes gravitate to this region and point near the anus, and that the vicinity of an enlarged prostate, or a diseased bladder or seminal vesicles, may cause perineal abscess, and encroach upon the rectum. I have punctured an abscess seated between the prostatic urethra and rectum and projecting into the latter—to relieve retention of urine; and Gooch relates the case of an old gentleman long subject to gravel who, after a perineal abscess and much subsequent complaint of pain at the anus, was found, on examination (which had been unwisely deferred), with a urinary calculus of a slender, tapering shape, and over an inch long, projecting more than a third of its length into the rectum. Its removal was followed by cure. (*Chirurg. Works*, London, 1792, vol. iii., p. 216.)

I am disposed to emphasize the subject of etiology, because the more thoroughly we grasp the causes of disease the greater the chances of success by hygienic and preventive measures, and the more direct and rational our treatment.

Before describing any of the various forms in which we encounter them in practice, it is important to observe that *all abscesses near the lower end of the rectum have certain characteristic features in common*, viz.:—

1. They can be rarely made to abort, going on almost inevitably to suppuration.
2. They do not heal readily, but as a rule tend to degenerate into chronic sinuses and fistulæ.
3. The pus which they discharge is offensive in odor, in consequence of the exosmosis of gases from the bowel.

From what I have said thus far you will already understand, I think, why it is a received rule of surgical practice that *these abscesses should always be opened, and opened early*, even without waiting for unequivocal evidences of fluctuation. It is another good rule, to be mentioned in this connection, that *all incisions for this purpose should radiate from the anus as a centre*; we thus avoid cutting across the general course of blood-vessels, and we escape, also, possible bad effects of subsequent contraction in healing.

Abscesses in this region vary in situation as well as in size, and they vary widely in gravity, as we shall see.

Often a little round lump will form just at the verge of the orifice of the anus, taking its origin from a hard stool, or an external pile, or the chafing of the napkin of a menstruating woman. It becomes hot, and exquisitely painful. This is, naturally, one of the most sensitive spots in the body; the sphincter is provoked to spasmodic contraction by the presence of the painful little tumor, which is therefore constantly pinched, and for four or five days, or until it bursts, life is a burden.

If abortion cannot be effected in twenty-four hours by a pig's bladder partially filled with ice and moulded accurately to the part, then the tumor should be

freely incised. Freezing with ice or ether-spray might replace general anaesthesia. Afterwards a piece of fine sponge, cut to fit the part and moistened with laudanum or comp. tinct. benzoin, may be kept in contact with it. These little anal abscesses, which, like those of the eyelids (hordeoli), often originate in glandular follicles, cause an amount of pain out of all proportion to their size. They occur more frequently before middle life, and in some individuals show a tendency to habitual recurrence. The regular use of an astringent or alcoholic lotion to harden the skin is often of service in such cases. One form of this marginal abscess undoubtedly takes its source in a little varicose venous pouch—one of the varieties of origin of the external haemorrhoid; this, when left to itself, is likely to leave behind it a minute "blind external fistula," often associated with a little flap of shrivelled integument.

A *painless* variety of marginal abscess sometimes forms insidiously, generally in a delicate, perhaps phthisical subject, it may discharge itself and leave a little fistula without its existence having been suspected. This is more of the nature of what is known as the "dermoid" abscess, and it requires decided local stimulants to make it heal after incision.

Where the focus of pus formation is situated further from the verge of the anus and beyond the grip of the sphincter, the pain, even of the acutest grade of abscess, although from its greater size very considerable, is not so constant and intolerable as in the first variety. There is more or less extensive redness of the skin, followed by central softening, and accompanied by febrile reaction. Entire rest, narcotic and sedative poultices, with early and free opening, are the remedies. Such a case, if not promptly met, might linger a fortnight or longer. One of its prominent difficulties is to provide for defecation without great temporary increase of pain. It is better that this should be done daily, or every other day, than to run the risk of faecal accumulation and its consequences, which might interfere with subsequent prompt repair. The best means to use for this purpose are a moderate dose of some mild, reliable laxative, such as castor oil, sulphur and cream of tartar, or fluid extract buckthorn, assisted at the right moment by an enema of warm water and sweet oil.

The introduction of the nozzle of the injecting tube is not painful under these circumstances, if rightly managed, and it is usually wise to overrule the objections of a patient who has no experience of this remedy. The obstruction to the local circulation from a loaded rectum constitutes a positive aggravation of the malady.

This is the more common form of acute abscess near the anus. When left to itself the complete relief from pain which follows spontaneous discharge leads the patient to dismiss the trouble from his mind and consider himself cured. It is only some weeks later that the fact forces itself upon his attention, in consequence of finding his clothing more or less constantly soiled by a watery and perhaps offensive discharge, that a fistula has formed.

It happens, occasionally, that a collection of pus forms outside of the rectum, in most cases just on a level with the upper limit of the sphincter, and, failing to reach the surface externally, and in most cases causing no very urgent pain, finally discharges itself into the bowel, so that the patient after voiding some matter at stool, finds himself relieved. It is in this matter that which is called the "blind internal fistula" forms—a variety of fistula which is not very common. The relief, however, in a case like this, is not usually permanent; a hard lump remains somewhere on the buttock, near the anus, and continues somewhat tender on external pressure; sooner or later it becomes the seat of another abscess, which may break externally, and thus the complete process of repair failing, the "blind internal fistula" is converted into a "complete fistula."

In both this and the last variety of abscess the exciting cause is undoubtedly, in most instances, a perforating ulcer at the bottom of one of the lacunae of the rectum, which are situated just above the external sphincter, the ulceration having been provoked by the lodgment in the little pocket of some source of irritation derived from the passing faeces. Hence an explanation of the fact that when a complete fistula follows one of these abscesses its communication with the bowel is found most frequently just above the upper limit of the external sphincter. Not rarely the starting-point of the abscess is in the substance of this muscle, so that the resulting fistula actually traverses the muscular mass. When the abscess extends entirely outside of the sphincter muscle, it then occupies the ischio-rectal fossa, and, in the loose connective tissue and fat of this region provided to accommodate the varying bulk of the rectal pouch, finds room for rapid development.

It is a much more grave form of rectal abscess, that which takes its origin, at first, deep in the ischio-rectal fossa. It is caused in some cases, doubtless, by ulcerative perforation of the rectal pouch; in others as a direct result of constitutional dyscrasia. The progress of these cases is often slow, insidious, and depressing, because the pus tends to travel inwards—in the direction of least resistance rather than towards the surface. The dense integument and subcutaneous cushion of the buttock become thickened and brawny, often over a considerable extent of surface. There is not, necessarily, any very urgent pain or throbbing; but fever is present, and frequently there are evidences of septicæmic depression. When the surgeon is not familiar with these cases, and waits for evidences of fluctuation before interfering, extensive destruction of pelvic connective tissue may occur, involving danger to life. A finger in the rectum will recognize increased heat and an œdematous, doughy feel. The indications are those of phlegmonous erysipelas; the surgeon should make an early and free opening with the knife through the integument, and follow it with his finger, so as to secure a direct and sufficient outlet—not only for pus, but for sloughy debris. This affords the only assurance of safety. When it is neglected there is liable to be extensive surface ulceration.

tion and sloughing, with an amount of destruction of pelvic connective tissue around the lower end of the gut, which is often irreparable; and when the patient does recover he is liable to permanent disability.

I was consulted recently by a healthy-looking Western gentleman, in middle life, who was about to marry a second time, for occasional inability to prevent escape of flatus from the anus, and when his bowels were loose he was also liable to incontinence of feces. He had been operated upon twenty years before for fistula, but, through his own neglect, the disease was not cured. Other abscesses followed, one of which was very severe and extensive, and it left, after long convalescence, several new fistulous tracts. These were subsequently laid open at different operations, and all healed soundly. On examination I found the anal orifice retracted much more deeply between the nates than usual; indeed, vigorous pulling asunder of the buttocks was required to bring it into view. It was formed posteriorly by a dense cicatrix, and a slight protrusion of mucous membrane presented. There was no grip to the sphincter, which had evidently been seriously damaged. There had been also, pretty certainly, extensive loss of substance of the pelvic connective tissue around the lower end of the rectum, and powerful contraction of the granulation tissue during repair. The excessive retraction of the anus was also in part due to the constant use of the *levatores* in efforts to aid the weakened sphincter in retaining the contents of the bowel. The parts presented the appearance which might have followed entire removal of two inches of the lower end of the rectum, including the anus. Recognizing no prospect of benefit from operative interference, I advised palliative measures, amongst others the wearing of a small plug of prepared oakum moulded to the part.

The result of another case which I saw some years ago was even less favorable.

A gentleman of 47, of good constitution, but sedentary, luxurious, and self-indulgent in his habits, developed a deep ischio-rectal abscess without any obvious cause. The symptoms were serious, and the surface induration excessive. His usual attendant, who watched the patient assiduously, discovered some soft, imperfectly fluctuating points towards the end of the third week, and made small punctures. Ulceration and sloughing followed, and when I saw the case later there was a gap several inches deep extending pretty much from the coccyx to the base of the scrotum, and this was being dressed in daily with lint. The granulations were feeble, and the patient's vitality very much depressed. Syringing with aromatic wine and painting with balsam Peru and comp. tinct. of benzoin were substituted for the lint dressing, and a general supporting treatment adopted. Under this course the patient gained, but very slowly, and declining the advice to take a sea voyage as offering the best chance to stimulate his flagging powers of repair, went to the country at the end of six weeks to avoid the summer heats, where some months later I saw a notice of his death—from exhaustion. In

this case I formed the opinion, in consequence of the utter lack of vital force of the patient, that a depraved condition of the blood, and, in fact, of the whole organism, from a long-continued, faulty mode of living, was the cause of his attack, and I feel confident that this form of abscess comes often in a similar way.

There is, plainly, a wide interval between the little, round, painful abscess of the margin of the anus and the grave forms of disease just described, and in practice we encounter many varieties of abscess intermediate with these which I have brought forward as typical examples; but it is worthy of being always borne in mind that the same rule of treatment is imperative in all abscesses near the anus or rectum, viz., to open early and freely, with the double object of shortening the period of pain and tissue destruction, and of securing a cure, if possible, without fistula.

Troublesome bleeding from opening these abscesses rarely occurs. Pressure applied in the usual method, by compresses and a T bandage, or strips of adhesive plaster, is always available, but I prefer the sub-sulphate of iron—used either in solution, or as a dry powder. I have found this substance entirely efficient as a hæmostatic, and it makes a good dressing—possessing no irritating or escharotic properties, but, on the contrary, being an excellent disinfectant, and a salutary local stimulant. It forms a scab under which healing goes on without pus formation. I have filled the cavity of an abscess with the dry powder, blowing it in through a tube, after the manner recommended by Marcus Aurelius Severinus for his famous “catagmatic powder,” with excellent effect. There is no reason, therefore, why the abscess should not be opened so freely as to render any subsequent retention of pus impossible, and this is the condition on which prompt healing and escape from the formation of a fistula depend. I have little doubt, after the results I have seen from the antiseptic method, that if it were faithfully used in opening and dressing these abscesses, and accurate drainage secured by means of caoutchouc tubes or horse-hair, healing without fistula would be the rule, instead of the rare exception, as at present. The striking success of Volkmann, as set forth in his recently published operations upon the rectum, certainly justifies this hope. But even with the aid of antiseptics in insuring prompt repair, early and free opening cannot be dispensed with.

There is a variety of abscess properly mentioned here which constitutes an exception to the rule I have just laid down, and our knowledge of it is both recent and valuable. The cavity beside the rectum, familiarly known as the *ischio-rectal fossa*, was first accurately described, and this name given to it, by Velpeau, in 1829. In 1856 Richet first pointed out and described formally a region lying beside the rectum, but *above* the ischio-rectal fossa, and separated from it by the levator ani muscle and the *faciæ* which line its surfaces. This musculo-membranous diaphragm forms at the same time the roof of the old fossa and the floor of the newly-described

space which, in fact, lies between it and the parietal aspect of the peritoneum as the latter is reflected from the walls of the pelvis over the rectum and bladder. In the loose connective tissue which occupies this "superior *pelvi-rectal space*," as Richet has named it, abscess occasionally forms.\*

The symptoms which accompany the formation of an abscess in this region are obscure, and its progress slow, in consequence of the difficulty with which the pus finds an outlet. The musculo-membranous layer of the levator is not easy to penetrate. Ultimately the pus discharges, either by ulcerating into the rectum—high up, of course—or by working backwards through a partial opening which exists normally in the median line near the sacrum. It now escapes from the pelvis through the upper sacro-sciatic opening, or gravitates downwards beside the rectum, and points externally near the anus, constituting a variety of fistula which requires a special treatment for its cure, and this we shall consider hereafter. The route by which the pus of an abscess of the upper pelvi-rectal space escapes is the same which is followed by an abscess taking its origin near the vertebral bodies, when it makes an opening near the anus, simulating fistula in ano.

These, then, are examples of varieties belonging to our category of abscesses near the anus and rectum, which we cannot open early, simply because they cannot be reached, even if accurately diagnosed. I could not have covered the subject of the present lecture without mentioning them, nor could I have completed the etiology of fistula—as far as fistula takes its origin in abscess—which I also had in view.

Some years ago I watched with much interest the case of an eminent lawyer, who ultimately died exhausted from the effects of what I afterwards recognized as an abscess of the upper pelvi-rectal space. He was of delicate constitution, but not manifestly tubercular. The disease appeared at 55, after failure of the general health. Pus presented at the sacro-sciatic foramen, where I gave it vent, and the sinus, which communicated with the interior of the pelvis, never healed. Another abscess formed later on the buttock. The functions of the pelvic viscera were not seriously deranged. There was no evidence of diseased bone.

What are the chances of cure, without fistula, of abscesses near the rectum or anus? Allingham's table (*Disease of Rectum*, London, 1873, p. 19) of 4,000 consecutive cases of rectal disease observed at St. Mark's Hospital (out-patients) includes 196 abscesses, with the remark added that "of these 151 became fistula, and the rest were probably cured." This would give nearly twenty-three per cent., or about one in four, which I should consider somewhat too favorable a prognosis. It remains for us to improve the chances of cure by our methods of treatment, and the points I have sought to make look to this end. The following case, which illus-

trates still another variety of abscess, is of interest in this connection:

A lady of 28, of good constitution and well nourished, under treatment for a syphilitic taint communicated by her husband, rather suddenly failed in health, and soon after became conscious of pain and swelling near the anus. When I saw her there was a dat, fluctuating tumor, as large as a pullet's egg, extending from the left buttock to the anus. The pus was evidently just beneath the skin, but there was no redness at any point. It was opened freely, giving vent to a quantity of dark-colored and very fetid matter. Under quinine and wine this abscess healed entirely within six weeks, without any local treatment beyond a poultice leaving no fistula. I verified the cure by subsequent examination, for I had told her, before opening the abscess, as I always do, that it would not probably heal without another operation, and she was, therefore, suspicious. Three years afterwards this patient had another abscess of the same character, but on the opposite side of the anus, which was treated in the same way, and it also got well within the month. I have examined this lady since, and found the cure perfect.—*N. Y. Medical Record*.

#### COD-LIVER OIL.

Mr. L. Monrad Krohn, apothecary in Bergen (Norway), who has been for many years a dealer in cod-liver oil at the most important market in Northern Europe, furnishes the following interesting information to the *Pharmaceutische Handelsblatt* (No. 105):

Properly speaking the shore of Norway is not rich in fish. The immense extent of coast, however, and the extent of the surrounding ocean, bring it about that the thinly-scattered population obtains a larger harvest of fish than might be expected, especially at particular seasons of the year.

During spring, summer and autumn the catch of herrings of different kinds and sizes, and during winter the haul of dorsch is exceedingly large. The latter (also known as skrei, cabillau, *Gadus morrhuis*, Linn.) occurs during January and February along the coast near Bergen and northwards, particularly about Sindmer and Romsdalen, where in one season between six and eight millions of fish are usually taken. Sometimes during the same months, but generally later, the catch begins at the Lofoden islands (67–69° N. lat.) with a very high average yield. For instance, during last winter no less than 24 millions of fish were taken. Later still begins the catch in Finnmarken, where it is often as abundant as at the Lofoden islands. The yield during last winter, however, amounted to only 10 millions.

In order to properly understand the manufacture of the various products obtained from these fish, it is important to remember that the fisheries extend for a distance of nearly 200 geographical miles, in the midst of winter, the days

\*Anatomie Méd. Chirurg., Paris, 1873, 4th ed., p. 93.

being very short and the weather rainy or stormy, and often snowy and cold. The fishermen do not reside near their fishing grounds, but assemble in large numbers at the latter (as many as 16,000 sometimes at the Lofoden islands); nor are there any accommodations to be had for housing the men on shore any more than for storing or properly manipulating the captured fish.

As soon as caught, the dorsch are brought on shore, cleaned, their livers, roes, and intestines removed, and either sold to dealers or manufacturers, or utilized by the fishermen themselves for the preparation of the oil. There are five grades of the latter:

1. Steam-ried cod-liver oil,  
Oleum jecoris album vapore paratum.
2. Ordinary medicinal cod-liver oil,  
Oleum jecoris flavum.
3. Light-yellow cod-liver oil.
4. Light-brown cod-liver oil,  
Oleum jecoris flavum fuscum, for medicinal and industrial purposes.
5. Brown tanner's oil.

The method of manufacturing the first of the above grades is in principle the same everywhere. The livers are delivered at the factory as fresh as possible, as they are liable, in common with all oily bodies, to become rancid on exposure to air. They are placed into large tinned-iron kettles, exposed to direct or indirect steam-heat, and the exuding oil is removed into closed receptacles as speedily as possible. It was customary, formerly, to pass the oil through linen, woollen, or other filters (a custom which still prevails in Scotland and some parts of North America), but this practice has been abandoned, the oil being transferred, while still warm, into *leaden* tanks, where the stearin and accidental impurities (shreds of liver, etc.) are gradually deposited. Treated in this manner the oil is much less prone to become rancid than when passed through filters. According as the livers have been exposed to more or less heat and pressure, the quantity of stearin contained in it varies in proportion. After having stood at rest one or two months, the oil is drawn off clear. At this time, however, the temperature is of great importance. If it be drawn off at 4° C. (39.2° F.) it will not deposit any stearin when cooling down to this point; while if it be drawn at 12° C. (33.6° F.) it will certainly do so if exposed afterwards to a colder temperature. Whether an excess of stearin in cod-liver oil diminishes its medicinal value, is a question which need not be discussed here, but it certainly makes a considerable difference to the manufacturer as well as to the dealer, whether he sells oil nearly deprived of stearin, or such as contains notable quantities of it. A good deal of the variation in price of otherwise fine cod-

liver oil depends upon this difference. The above method was introduced by P. Möller; but as it is so simple and used by all manufacturers, it makes no difference whether the oil be obtained from Möller himself or from other large firms, as H. Meyer, Ibenfeldt, F. Hausen, or others.

Accidental circumstances will sometimes furnish to one or the other manufacturer the freshest livers, and therefore yield the freshest oil. Generally the factories are situated near the established fishing grounds. The proprietors make contracts with the fishermen for a supply of fish, and it may sometimes happen that the yield of a haul is too small, and has to be kept until supplemented by a second supply before it is worth while to begin operations, thereby endangering the quality of the product.

The name of the manufacturer is no criterion whatever as to the quality of the oil; it is necessary to judge from the oil itself. The best is made upon Sindmer, in the Lofoden islands, and in Finnmarken; the latter, however, generally requires a second clarifying process before being as handsome as the other.

The price of the oil depends in the first place upon the proportion of the stearin it contains, and in the second place upon the yield of the season. In some years the harvest is everywhere abundant, in other years stormy weather may interfere with fishing operations, and besides the Newfoundland fisheries exercise a considerable influence upon the price. In seasons where the yield of the latter fishing grounds is below the average, England, France, and America draw large supplies of cod-liver oil from Norway, and often cause a rise of the price by 50 per cent.

The second grade of cod-liver oil is that prepared by the old method: namely, by allowing the livers to stand in the cold, whereby the oil exudes spontaneously. Owing, however, to the long exposure to air, this oil has a more fishy odor, and a coarser taste than the first quality. Still it may be obtained of good color and agreeable taste by keeping the livers in new oaken tubs, and removing the oil as soon as separated. Unfortunately, the methods of manufacture and the appliances vary greatly; sometimes the livers are placed into wooden tubs, which have been used for years for the same purpose, and is moreover often drawn off into casks lined with paraffin or tar, whereby it acquires a most disgusting odor or taste. There is no remedy for this drawback as long as this quality of oil is inquired for upon the drug market at an advance, over the most ordinary oil, of only one or two thalers per ton of about 1,000 kilos.

Producers receive the same price at the spot for the first grade of oil as for the second; foreign purchasers, however, are compelled to buy the finer oil from the commission dealers at a slightly advanced price. In general, the price of good cod-liver oil depends upon the general



oil market. Whenever there is a scarcity of rap, or olive oil or of seal-blubber, cod-liver oil takes their place. With an abundance of other oils, the price of cod-liver oil falls. It is said that as much as 1,500,000 kilos (about 3,275,000 lbs.) of this grade of oil are used annually for medicinal purposes.

The next grade of oil, which exudes from the livers by long standing or by fermentation, is mostly used for technical purposes, as in soap, candle, and chamois-leather factories.

Sometimes the purchasers of the livers do not have time to try out the oil, from one cause or another; and in this case the livers are left in the vats where they have been first thrown. Fermentation then sets in, and the oil, when afterwards removed, has a browner color, but a still palatable taste. This is the so-called *Oleum jecoris flavum fuscum* (light-brown cod-liver oil), the fourth grade, of which a good deal is exported to France, and which is the kind introduced by Dr. de Jongh, who was the first to make the traffic in cod-liver oil a personal lucrative undertaking. He purchases his oil, like other houses, allows it to clarify thoroughly, fills it into bottles, and charges a very handsome price. Of this quality 11,000,000 kilos were exported from Bergen in 1877; how much of it was used for medicinal purposes exclusively, it is impossible to say.

After the livers have been treated by one or the other methods, as detailed above, the residues are more or less roasted in large iron kettles and then expressed. A thick pyroligneous, greenish-brown to black oil is thereby obtained, being the fifth and last grade, which is used for tanning purposes.

The exports from Bergen during 1877 amounted to about 1,700 tons of the first and second grade, 1,400 tons of the third, 1,100 tons of the fourth, and 3,600 tons of the fifth.

Adulterations of cod-liver oil in Norway are unheard of, and besides are entirely uncalled for as the price of fish oils is so much inferior to other animal or to vegetable oils. The only foreign admixtures likely to occur are impurities from careless manufacture, as animal tissues (from the liver, etc.) and water. The oils obtained from other fish, although occurring in the market, are obtainable only in limited quantities, and at prices equal to that of cod-liver oil, so as to make the substitution for cod-liver oil unprofitable.

Only in the case of the first grade of cod-liver oil, *Oleum jecoris album*, is it necessary to be cautious, not on account of adulteration, but of accidental substitution. During the dorsch season, but more particularly after its conclusion, at the coast of Finnmarken, large quantities of the so-called *hoakjarring* (*Seymnus borealis*) a large fish, 12 to 15 feet long, are caught. The liver of a single fish yields from 230 to 350 lbs. of oil, and since a fishing-boat may return, after

an absence of two or three days, with about two tons of liver, it is evident that a profuse supply of this oil may be placed upon the market. A good deal of this is now offered for sale, and being bright and clear nearly free from stearin, and cheaper than genuine cod-liver oil, it is often palmed off on ignorant purchasers. This oil has mostly an acid reaction, a peculiarly disagreeable odor, and is very difficult to digest. Purchasers who are unacquainted with this oil, and who only look to external appearance and low price, may easily be imposed upon.

#### TREATMENT OF DISEASES OF CHILDREN.

Dr. P. Brynberg Porter, in the April number of *American Journal of Obstetrics*, makes a report of two thousand cases of disease in children treated at Demilt Dispensary, from which we make the following extracts:

**CERVICAL ADENITIS.**—"In certain instances the glandular trouble seemed plainly due to some local source of irritation, but for the most part it was associated with a scrofulous or otherwise cachectic condition. In some instances the careful use of mercurial ointment, almost always accompanied with the internal administration of tonic and alterant remedies seemed to act quite happily. No attempt was made to reduce the size of chronically enlarged glands by the injection into their structure of acetic acid or tincture of iodine.

**ANÆMIA.**—"Of course there were a vastly larger number of patients than twenty-nine who were anæmic; but in these the anæmia seemed to be the principle or only trouble, while in the others it was merely one of the manifestations of some general constitutional condition, like rachitis or malaria. In two cases the anæmia appeared to be the result of repeated epistaxis, from which the children had been suffering for some time, and in another the debilitated state of the system (without appreciable disease of the lungs or other organs) gave rise to cold night-sweats of considerable severity. In the latter case the patient, a girl of six years, soon recovered her health and strength under a better hygienic regimen and the use of cod-liver oil and iron, with fifteen minims of tincture of belladonna at bed-time, in accordance with the teachings of Ringer and Fothergill. In an article on Anhydrotics, published in the *Practitioner* a little more than a year ago, Dr. Fothergill says: 'The most potent of all anhydrotics, in my experience, is unquestionably belladonna. We are indebted to Dr. Sidney Ringer for our knowledge of this property of belladonna; and I have no hesitation in saying that the use of this agent completely changes the aspect of many cases of pulmonary phthisis. For the arrest of the exhausting night perspirations of phthisis belladonna is as potent as digitalis in giving tone to a feeble heart. . . . My

experience of the use of belladonna in the treatment of hydrosis is not a very limited one, and it enables me to say that belladonna or atropine may be freely used without apprehensions as to any serious toxic effects appearing. It is not a treacherous drug by any means, and may be used with confidence.'

**ASCARIDES.**—"The symptoms of ascarides are succinctly given in the following manner by Heller, in Zeimssen's Cyclopaedia. (The description refers particularly to *lumbrici*, but is equally applicable to *oxyurides*, except that, when the latter are present, we have in addition the intolerable irritation about the anus, which renders them, 'in spite of their small size, the very worst tormentors of man.') 'Foremost among these phenomena we have itching of the nose, colic-like pains around the navel, boring and tearing pains in the abdomen, inflation of the region of the stomach, changeable appetite, and diarrhoea, with the expulsion of masses of mucous, which are occasionally tinged with blood. As external symptoms, we not infrequently see swelling of the face, darkening of the eyelids, unequal dilatation of the pupil, foul breath, and general wasting. Nervous symptoms, such as irregular pulse, unpleasant dreams, grinding the teeth during sleep, and starting out of it in a fright, with pains in the limbs, are all said to be caused by the presence of the worm. These symptoms are all very indefinite, and but little characteristic; still, when taken together, they are especially valuable as not belonging to any other disease.' To these signs I may add a marked craving for bread in a certain proportion of cases, and nausea in a few instances. In one or two of my cases there was epistaxis, which was no doubt induced by the constant picking at the nose, and in two or three convulsions, for which there seemed to be no other assignable cause than the nervous disturbances produced by the presence of the worms. The statement of Heller, that round and thread worms are even more frequent in adults than in children, seems almost incredible, though apparently supported by the statistics which he gives. Certainly, if this is the case, they very rarely produce any symptoms at all in the adult. No attempt was made in my observation to show the relative frequency of the *lumbricoides* and the *vermicularis*; but, in a number of instances, it was found that both varieties of ascarides were present in the same child.

**TREATMENT OF ASCARIDES.**—"As regards treatment, santonin has been my unfailing resource in both forms of worms, and the longer I employ it the more implicit confidence do I place in it. My method is that adopted by the late Dr. John S. Parry (in whose service in the children's wards of the Philadelphia Hospital, I first saw santonin administered), viz, to give one grain for every year of the child's age, though seldom increasing the dose beyond five

grains. I am usually in the habit of ordering five powders made with an equal quantity of pulverized sugar, which may be placed dry upon the tongue, and which children swallow with great avidity. One of these is to be taken every night and morning until all are gone, when a dose of castor-oil or other simple purgative is given. Heller recommends it in doses of from one-third to one and a half grains, the latter dose only to a grown-up person; but these, I think, too small to get the full effect of the drug, and he himself acknowledges that, except in large doses, it is quite innocuous. I remember one case in which he ordered it in four or five grain doses, when the German druggist, to whom the prescription was taken, brought it back to me in great consternation, fearing that I had made some frightful mistake, and that the child would surely be killed if it took the medicine.

**BRONCHITIS.**—"I have nothing new to offer on this subject, but will merely say that in the early stages of acute bronchitis I have found tincture of aconite and muriate of ammonia of very great service; and that the old-fashioned brown mixture, usually combined with one or more appropriate expectorants, has proved of the most universal application of any remedy that I have employed. In chronic bronchitis cod-liver oil, either alone or in combination, has been my great stand-by. Where the cough is very annoying at night, chloral often acts in the happiest manner. There were a few cases of capillary bronchitis, but none accompanied by pulmonary collapse or of very alarming seriousness.

**CHOLERA INFANTUM.**—"In the treatment of this dangerous affection the most rigid attention to diet, at first allowing no food whatever to be given, and the early and free use of stimulus I have found to be the most important points. I have sometimes ordered as much as a teaspoonful of brandy (though not to be given all at once) every hour until the system rallied, if it could be borne by the stomach. To allay vomiting both in cholera infantum and ordinary infantile diarrhoea, I sometimes resort to wine of ipecac. in drop doses repeated every hour, as recommended by my friend Dr. S. Henry Dessau. J. Lewis Smith employs one-tenth to one-sixth of a drop of the tincture, but it seems to me that such doses are too small to have any appreciable effect.

**CONSTIPATION.**—"Of course there was a very much larger number of patients than eight suffering from constipation, but in the eight cases recorded under this head it seemed to be the only difficulty present. In the constipation of young infants I have found the use of oatmeal, suggested to me by my friend Dr. B. F. Dawson, frequently of service; but sometimes it has entirely failed to relieve it. Where I have found it necessary to resort to the use of drugs, pod-

phyllin in small and repeated doses has been quite a favorite one with me."

#### TRACHEOTOMY IN DIPHTHERITIC CROUP.

The true value of tracheotomy in diphtheritic croup is a question for the decision of which more accurate and reliable data is required than we as yet possess. As a contribution to this literature, comes a report, by Dr. Bogue, of Chicago, of fifteen cases in which he operated, six of them successfully. This is not a large percentage of recoveries, but attention is called to the fact that, if left alone, these six successful cases would, in all probability, have shared the fate of their companions. After a careful analysis of these cases, Dr. Bogue draws the following conclusions:—

1. The so-called membranous croup and diphtheritic croup are the same disease, differing only in situation, amenable to the same treatment.

2. Tracheotomy should be resorted to in all cases where death is threatened by suffocation from obstruction in the larynx, and as soon as the breathing has become insufficient to sustain the vital powers. It should be performed during the second stage of the disease.

3. It is best to use an anæsthetic; it renders respiration easier by controlling spasm of the larynx.

4. The operation should be done by careful dissection, and, if possible, the trachea should not be opened until all bleeding has ceased.

5. A tube should be used. It causes as little irritation as anything else would, and keeps the wound open better.

6. The room should have a temperature of not less than 75° F., and should be free from currents of air. The atmosphere should be saturated with moisture, by means of boiling water, or the atomizer, and this water may be variously medicated to suit individual fancy. In these cases a solution of glycerine in water (1-6) was used, chlorat of potash or carbolic acid being sometimes added.

7. The patient must be *fed*, artificially if necessary. There may be, during the first night, after the removal of the tube, some difficulty in breathing from spasm of the larynx, which will usually be relieved by an anodyne, such as a full dose of paregoric.

In none of the recovered cases has there been any impairment of the voice.—*Chicago Medical Journal and Examiner*, February, 1878.

#### IODOFORM.

The yellow but strong-smelling crystals of iodoform are soluble in ether, and, as our readers were long ago informed, the solution in that fluid leaves much less odor behind than any other way of employing it. Oils, fixed and

volatile, are not pleasant or useful solvents. Chloroform is suitable for many purposes. Some give a mixture, and use a mucilage to suspend it. Bartholow thinks this will do, but the result is nauseous. Mr. Berkeley Hill and Dr. Prosser James both give pills, the best way of taking it internally. The former gives a grain-and-a-half, the latter one grain, in each pill, which we should think enough in ordinary cases. Externally it may be dusted over sloughing or ill-conditioned wounds, chancrels, irritable ulcer, rodent ulcer, phagedæna, and syphilitic ulcers. Fissure of the anus, hemorrhoids, and hypertrophy of the prostate, are said to have been relieved by suppositories. It is an anodyne, too, and relieves the pain of cancer, while at the same time it seems to partially disinfect the discharge. It is in syphilis it has been most used. It was discovered about the year 1824 by Serullas, and its properties have long been known to chemists. It is readily obtained by adding an alcoholic solution of potash to tincture of iodine, and crystallizes as a yellow lustrous coarse-grained powder of a peculiar pungent penetrating odor. It stands in the same relation to its analogues, chloroform and bromoform, as hydriodic acid does to hydrochloric and hydrobromic. It may be regarded as chloroform ( $\text{CHCl}_3$ ), in which the three atoms of chlorine are replaced by three of iodine ( $\text{CHI}_3$ ). It also forms substitution compounds with chlorine and bromine. It is sparingly soluble in water and glycerine, less sparingly so in alcohol and warm oil, but readily soluble in ether, and to a still greater degree in chloroform.

Solutions of iodoform in alcohol and ether soon turn of a dark iodine tint; perhaps some substitution product or decomposition takes place. Chloroform seems a better solvent. Iodoform can readily, by trituration, be made into an ointment with either lard or vaseline. Its odor is only partially disguised by the addition of essential oils. As a powder, it can be employed alone or diluted with fuller's earth, magnesia or tannin; the last mentioned body is said to remove, in some measure, its powerful and disagreeable odor.

Mr. Berkeley Hill has used iodoform as a dry powder, brushed lightly over the surface with a moistened camel-hair pencil, for three years. During the last few months he has often substituted for the dry powder an ethereal solution, one part of iodoform in six or eight of ether. The sore is touched or dabbed with a pencil dipped in the ethereal solution, according to its size and depth, lightly or copiously. The ether quickly evaporates, leaving a thin pellicle of iodoform, that as effectually stays the spread, and produces healing of chancres, as does the more copiously applied dry powder. Thus the surface is covered more exactly, and the disagreeable smell of the iodoform is too faint to

attract attention. The sore is well washed with water and dried before the iodoform is applied, and the surface is lastly protected by a bit of dry lint. When the secretion is abundant, the dressing must be renewed twice daily, but in three or four days the amount of discharge becomes so scant that one dressing per diem suffices. In this way Mr. Hill finds venereal sores heal quickly. Pain subsides at once; the sore is well in a week or ten days, and the chances of consecutive inoculation or bubo greatly lessened.—*The Doctor.*

#### CLINICAL LECTURE ON BRIGHT'S DISEASE CURED BY JABORANDI.

Delivered at the Pennsylvania Hospital, by  
J. M. DA COSTA, M.D.,

Professor of Practice of Medicine in Jefferson Medical School.

A. W., æt. 55, single. Admitted on March 20th. Has never suffered from rheumatism, and has never had any specific disease. Has always been regular in her courses. The patient states, most positively, that she has been perfectly well all winter, and that her illness only began one week prior to her admission. She then noticed that being exposed to the vicissitudes of the weather, her feet and then her face began to swell. Finally, a general anasarca came on. She had, at the same time, some loss of appetite, with gastric pain and cough. When she was admitted to the hospital, her whole body was greatly swollen, and she was somewhat feverish; the temperature in the mouth being 99°. The heart was beating feebly, or rather the sounds of the heart were feeble. She complained of pain and weight in the pit of her stomach, and of considerable dyspnoea. She passed but little urine. There was no heart murmur to be heard, although we made a very careful examination of that organ. The tongue was clear, and the digestive disturbance not much marked.

What was the cause of the dropsy? A clue was at once afforded us by an examination of the urine, which was found to contain an enormous amount of albumen; the albumen, when precipitated, filling at least one-third of the test-tube. The microscope taught us that the urine also contained blood corpuscles, epithelial and hyaline casts and a few oil drops. Most of the casts were, however, epithelial.

I at once diagnosticated the case as one of acute Bright's disease—Bright's disease complicating acute renal dropsy. All this was self-evident. Only one doubtful point remained to be cleared up. Was, or was there not, prior organic disease of the kidneys? This was at first hard to determine off-hand. We had to wait until the acute attack had passed away under the proper treatment. The presence of casts and blood corpuscles in the urine seemed

to answer the question in the affirmative at that time.

To-day we have the best of reasons for concluding that no disease of the kidneys pre-existed. The case has ended in perfect recovery. The abnormal constituents of the urine have almost entirely disappeared. This case has been an extraordinary one, on account of the patient's very rapid recovery.

And now you will, of course, want to know what our treatment has been. How we have brought it about that in the course of two weeks after her admission the patient is entirely recovered. The general dropsy, albumen in her urine, and dyspnoea all gone together. I ascribe all my success in the treatment of this case to the free use of jaborandi. Five days after the jaborandi treatment was begun, the whole face of the case was changed. The dose I ordered was one drachm of the fluid extract of jaborandi thrice daily. This dose produced excessive diuresis and diaphoresis. I am convinced that in jaborandi we possess a most valuable agent for combating the dropsical complications of Bright's disease. It should be given either in the form of the infusion, or the fluid extract. In cases where uræmic poisoning is a factor, and where the drug is consequently not well borne by the stomach, I have administered jaborandi by injecting it into the bowel. Though the effects of the drug when injected were not so striking as in the present case, I yet see no reason why it should not be given by the bowel as well as by the mouth. I have also tried the drug hypodermically, but I prefer not to speak positively at present of its effects when so used. In one instance I will say that it did produce considerable irritation of the skin.

How are we treating this woman, now that the dropsy has all gone? She is taking dialyzed iron internally and hypodermically. This treatment is improving vastly her general health and nutrition.

The origin of the disease in the present case is a very common one. It was brought on by cold and exposure. In children, acute Bright's disease generally follows scarlet fever. In adults it usually comes on immediately after exposure to dampness and vicissitudes of weather.—*New York Hospital Gazette.*

#### HOW TO GET RID OF A BLACKENED EYE.

If one is so unfortunate as to get hit on a peeper, it is said that the effects can be removed within two or three days in the following manner: If there is much pain, foment the parts continuously with simple hot water until it ceases, and then keep the contusion constantly wet with the following lotion:

R. Muriate of ammonia.....2 drachms.  
Vinegar.....2 ounces.  
Water.....2 ounces. M.

## GUAIAIACUM IN SORE THROAT.

Dr. Frikzinger, in the *Philadelphia Reporter*, commends guaiacum in all forms of sore throat. He says:—

By contact guaiacum has the quality of causing the viscid secretions to become more consistent, and thus facilitate their removal, either by expulsive efforts of the patient or by gargles. Although this primary action locally is most unquestionably highly beneficial, it is owing to its secondary physiological effect upon the engorged capillaries, ramifying in the body of the gland, that the resolution is immediately accomplished. It is unquestionably owing to these peculiar properties of coagulative astringency locally, and the tonic action upon the walls of the over-distended capillaries, giving them force to expel the superabundant blood they contain, that gives guaiacum its specific virtues in curing quinsy.

As there is thirst and fever, and dryness and burning of the throat, the addition of nitre and potas. chlor. will meet the indications, and will modify the formula so as to be more agreeable for the patient. The following is a combination that has been used quite extensively for several years, and will be found as agreeable to take as any:—

R. Potass. chlor., 3j;  
Spts. æth. nit., 3iv;  
Tr. guaiac. 3vj;  
Syr. aurant. cort., 3vj.

Sig.—A teaspoonful every two hours, in water.

This should be taken in about a teaspoonful of water, or a sufficient quantity to allow the warming and constringent effect of the guaiac to be felt in the act of swallowing, and it is desirable that this should be done slowly. In case the bowels should move too freely the dose should be diminished, and as the disease ameliorates it should be administered at longer intervals.

If there is permanent enlargement, of not too long standing, the application of a solution of tannin in tincture of iodine and glycerine, applied to the gland, with a course of guaiacum internally, will prove of good service.

## HYOSCYAMINE.

Dr. H. Clifford Gill, in the *London Practitioner*, thus sums up his experience with hyoscyamine:—

"1. That a noisy, violent, dangerous, and troublesome lunatic can easily and certainly be rendered calm for some hours, and probably though not certainly, unless the dose be increased, be sent into a profound sleep lasting many hours. 2. That I have never seen any ill consequences follow the administration of hyoscyamine. 3. That the drug is most useful in acute delirious mania, in the various forms of remittent mania, and it is said also in the congestive (?) stage of G. P. 5. That in melancholia, and where there is much depression with brain irritation, little or no good is gained, and it is in

these cases, I am inclined to believe, that great dilatation of pupil is met with.

"Many doctors in general practice must frequently be called to cases of acute mania in their early stages, when it is that extreme violence in a private house is so fraught with danger both to the friends as well as to the patient. In such cases I think great benefit would be derived by the administration of a full dose of hyoscyamine; and even if, as is most likely the case, the attack is not cut short, yet the patient is calmed and sleeps quietly until other steps are taken for his after treatment. So, again, many patients suffering from dementia, who are for the most part harmless, and who live with their friends, are now and then liable to attacks of acute brain irritation and become very troublesome, noisy, violent, and dirty. In such as these I think much benefit will be found from this drug given at first in a full dose, three-eighths or three-quarters of a grain, and continued afterward in one-sixteenth to one-eighth of a grain dose. As a suggestion it might be quite worth trying in delirium tremens."

## CARBOLATE OF SODA IN WHOOPING-COUGH.

M. Pernot (*Lyon Medicale*, Sept. 23, 1877,) considers that he has discovered a specific for this troublesome affection in "phénate de soude," and gives details of cases in which, after other means had completely failed, he was able, by the use of it, to effect a complete cure in from ten to fourteen days. He places about 40 grammes of the crude salt in a porcelain capsule, and heats it over a spirit lamp so as to disengage carbolic vapours, the child being kept in the vapour a short time at first, and a longer time as he becomes more accustomed to it. In the most rebellious cases he has not required to use the treatment more than three times a day, and in most cases it has only been necessary to use it night and morning. He discusses the mode of preparation of carbolic acid and its salts, and ascribes the curative properties of the phenate of soda to the tarry compounds which it contains. "My observations," he says, "are now numerous; they, for the most part, resemble each other, and, speaking generally, we may sum up the results in the following words: 1st. There is a notable diminution in the number of 'kinks' after two to ten days' treatment. 2nd. The respiration is less painful, less anxious. 3rd. The 'kinks' are of shorter duration. 4th. There is less vomiting, possibly because the 'kinks' are shorter. 5th. Finally, the most stubborn cases, if I may so express myself, cease to advance from the commencement of the treatment, then diminish in intensity, little by little, and afterwards more rapidly."—*Glasgow Med. Journal*, Jan., 1878.



## ON ABSORPTION OF MEDICAL SUBSTANCES BY THE VAGINAL MUCOUS MEMBRANE.

Dr. E. W. Hamburger describes (*Prager Vierteljahreschrift*, Band cxxx.) a series of experiments performed by him to ascertain the absorbent power of the vaginal mucous membrane. He used solutions of the following substances, of the strengths indicated: Iodide of potassium, 15 per cent.; ferrocyanide of potassium, 5 per cent.; ferrideyanide of potassium, 9 per cent.; salicylic acid, 2 per cent.; bromide of potassium, 6 per cent.; and lithia, 10 per cent. A plug of purified cotton-wool soaked in the solution was placed in the vagina, and over it two dry tampons. The bladder was first emptied, and afterwards the urine was drawn off by the catheter and examined at intervals of two or three hours. All the above-mentioned substances were found in the urine. Iodide of potassium was found two hours after the introduction of the tampon, and traces of it remained twenty-four hours after removal. Ferrocyanide of potassium, salicylic acid, and bromide of potassium appeared three hours after they were given. Hamburger believes that the administration of drugs by the vagina can be employed in all cases of obstruction of the normal passages, and that it will be specially useful in gynaecological practice.—*London Med. Record*, Feb. 15, 1878.

## MEDICAL PROPERTIES OF COLLINSONIA CANADENSIS (STONE ROOT).

An extract from "New Medicines" written by I. J. M. Goss, and published by Chas E. Ware, St. Louis, Mo.

Collinsonia was first used by the natives of America for sprains, bruises, contusions and ulcers; then by some root-doctors in colic, dysentery and diarrhoea; but while it may help such conditions by its direct tonic effects upon the capillary and mucous systems yet that is not its main sphere of action. It is now a settled fact that it acts directly upon the venous circulation, very similarly to that of arseulas, arnica, hamamelis, hydrastis, and also ignatias bean. It exerts a direct influence over the portal circulation, having the power to contract the coats of the veins, thereby lessening their calibre. And it influences the heart itself, consequently, the whole circulatory apparatus. When applied to a contused wound or an inflamed surface the vessels of the part soon contract, and the tumefaction is soon thereby lessened and finally relieved. This fact is conclusive evidence that this remedy has specific power over the capillary vessels. It has a favorable influence over mucous tissues, consequently it often cures leucorrhoea and catarrh of the bladder. I have used it internally, in connection with hamamelis, in cases of varix with very prompt success. This shows that collinsonia has a specific action upon the coats of the veins. But its most valuable properties are its direct action upon the vessels of

the rectum. I have often derived prompt results from it in cases of hemorrhoids. Where the tumors are small it often removes them. The dose is 5 to 15 drops three or four times a day. It possesses remarkable tonic powers also.

## A SOVEREIGN REMEDY IN SUMMER COMPLAINT.

By WM. M. GROSS, CLYDE, ILL.

The very best remedy in my judgment, for Cholera Infantum or Summer Complaint in children is Calcined Radix Rhei.

My attention was called to it incidentally, during last August. I was treating a little patient, aged six months, affected with this dreaded trouble—had used all the reputed remedies for this disease, but with little or no effect. When my attention was called to it, I prepared some by putting a portion of the root in an iron vessel and burning it until it was easily pulverized. Of this I gave about five grains; the child became quiet and seemed free from pain, and in about three hours the bowels moved again, passing a changed and even larger evacuation than at any previous time; and from that moment it began to get better and in a few days was entirely free from the disease. The success attained in this case led to the use of the same drug in a number of similar cases and with the same results.

In the forms of summer complaint incident to debility of the bowels, either when this condition depends upon general causes alone, or is the immediate effect of irritating ingesta or biliary derangement, Rhubarb, in this form, is superior to almost every other medicine.—*Medical Brief*, St. Louis.

## CONTRA-INDICATION OF IRON.

There are two different states found in women where iron is either totally contra-indicated or to be given with great caution. The first is a condition of amenorrhoea in florid, plethoric persons. The other is the opposite condition of menorrhagia in certain females. There are cases of menorrhagia associated with pallor and debility, where the usual compound of iron and extract of ergot is not so useful as a non-chalybeate treatment. In those cases it is not any imperfection in the process of blood manufacture which is to be remedied, for the blood is made rapidly and quickly, only to be lost at each menstrual period. It is here desirable rather to limit the rapidity of the blood formation, so that when the several vascular turgescence of the menstrual period comes, it will not find the blood vessels too distended with blood. This will lead to diminished catamenial loss, and so the blood waste will be economised. According to the experience of Dr. Brown Séquard and Dr. Hughlings Jackson, iron does not suit epileptics. It increases the tendency to fits. It may improve the general condition, but it aggravates the epilepsy.—(*Dublin Medical Press*, Oct. 3.)—*Chicago Med. Jour. & E.*

### THE LOCAL USE OF SOLUTION OF QUININE IN CHRONIC IRRITATION OF THE BLADDER.

Mr. T. W. Nunn has been using quinia locally for some years as an antiseptic, a bactericide, and in some forms of venereal sores. He says, however, that so far as its local use is concerned, the most striking result is obtained by injecting the solution of quinine into the bladder in those cases where the urine is loaded with pus and is *intensely offensive*, the bladder being irritable, the desire to urinate recurring every hour, or more often, for example, where the bladder only imperfectly empties itself, or when the continual use of the catheter is called for in enlarged prostate, or in atony of the organ. Mr. Nunn has recently been informed by a patient who has habitually had recourse to the catheter, —the urine voided being alkaline and highly offensive,—that the injection of the quinine solution has been followed by such an abatement of the sensitiveness of the neck of the bladder that the desire to micturate comes on now only after the lapse of six or seven hours, in place of after the lapse of every hour or every hour and a half.

The following is the method of using the quinine as a bladder injection: Dissolve twenty grains of disulphate of quinine in twenty-five ounces of water by the aid of a few drops of dilute sulphuric acid or a teaspoonful of *common brown vinegar*. Of this solution inject into the bladder two or three ounces, and let it remain.—*The Lancet*, Feb. 23, 1878.

### TREATMENT OF INFANTILE CONVULSIONS BY HYPODERMIC INJECTION OF ETHER.

We must not be surprised at anything we hear respecting the use of hypodermic injection, considering the rage there is just now for administering medicine in this fashion. In a recent number of *La Presse Médicale*, Dr. Gellé cites a case in which the above treatment was successful, and in which the method adopted was called for by the urgency of the symptom, and the impossibility of administering any remedies by the natural channel. Besides, the exact quantity of the medicine used could be estimated, which cannot be done when inhalation of chloroform or ether are employed. The infant was only seven months old, and, owing to improper feeding and the irritation of dentition, was suffering from continual vomiting and purging pain in the bowels, fever and fits of general convulsion alternating with a comatose condition. The chief indications were to arrest the vomiting and convulsions, then to bring on a crisis by sweatings, and lastly, to watch for the approach of a threatened attack of pneumonia. Ten drops of sulphuric ether were injected hypodermically into each leg of the child. The insertion of the instrument did not arouse the little patient. The convulsions ceased and did not return after the injection of the ether, the vomiting also ceased, and a period of repose was succeeded by a natural sleep.

The subcutaneous introduction of volatile anaesthetics is now frequently resorted to in France, and the object of Dr. Gellé in publishing the above case is to give his experience of this method of treating some forms of infantile convulsions.—*Medical Press and Circular*.

### TREATMENT OF EPILEPSY BY BROMIDE OF ZINC.

Experiments have been going on for some time in M. Charcot's wards at the Salpêtrière Hospital with bromide of zinc as a remedy for epilepsy. It can be administered either in the form of pills or as a syrup. The pills contain each three quarters of a grain of bromide of zinc. Commencing with one pill daily, the dose may be increased to twenty-five grains, increasing the quantity of bromide contained in each pill. The drug can be given in syrup according to the following formula: Bromide of zinc, 15 grammes; syrup of bitter orange-peel, 150 grammes; four, five, or six teaspoonfuls to be taken in the course of the day. The results obtained from the administration of these pills have been satisfactory.—*British Med. Journal*, Nov. 24, 1877.

### EUCALYPTUS GLOBULUS AS A DISINFECTANT.

In the course of some remarks upon the utility of infusions of eucalyptus, Sir John Rose Cormack, in his *Clinical Studies*, proceeds as follows:

I may here add my experience of the remarkable power of eucalyptus of destroying the fetid odor of morbid discharges without the substitution of another unpleasant smell. I have found that in hospital practice and in private sickrooms, patients and attendants often complain of the vapor of creosote and other deodorizing agents. No such complaints are or can be made of the eucalyptus however freely it may be used. I speak from an extensive trial of eucalyptus lotions in cases of ozæna, cancer of the tongue and throat, cancer of the uterus, gangrene and other affections attended by fætor.

### HOW TO INTRODUCE THE HYPODERMIC NEEDLE.

Dr. Allen writes: "Placing the palm of the left hand beneath the patient's arm or leg, with the thumb and fingers draw the skin tight over the upper aspects of the limb, in which state you have an unyielding integument. Then holding the instrument with the thumb and index finger of the right hand, place the beveled side of the point upon the place you have selected, at a proper angle with the surface; and, with a quick forward movement of the thumb and index finger only, keeping the hand immoveable, thrust the point through the skin into the subcutaneous tissue.

This manœuvre, if done quickly, will inflict little if any pain, and the patient will thank you, especially if he has previously been subjected to the almost universal method of pinching up a fold of skin for the puncture.—*Med. Record*.

## ACUTE ECZEMA VESICULOSUM OF THE TRUNK AND ARMS.

Patrick C., laborer, forty-five years of age, was admitted to the hospital March 9th. Excepting that he was subject to occasional attacks of dyspepsia, he had always enjoyed good health up to last summer. At that time he suffered from a skin disease apparently similar to that about to be described, but much less extensive. He recovered from this in about a month, and remained well until three weeks previous to his admission. During the winter he had undergone considerable privation, and about the middle of February he was attacked by a skin affection, which spread steadily up to the time he sought relief at the hospital. The disease, which was purely vesicular, and of a very marked type, was chiefly distributed over the flexor surface of both arms and forearms, especially about the elbows, and on the trunk (lower axillary and hypochondriac regions and buttocks). It was peculiarly symmetrical, the buttocks, sides of the thorax and abdomen, and arms showing almost precisely the same appearance on either side. The vesicles, which were rather larger than common, were situated on red and inflamed bases, and were usually quite discrete, though on the buttocks they were aggregated into large patches; in the flexure of the elbows they had coalesced, and had broken down, so as to constitute an eczema rubrum, consisting of a red, raw, weeping and crusted surface. The eruption itched and burned severely, causing the patient great discomfort. He also complained of slight general malaise, with occasional chilliness.

The patient was placed upon the following alkaline saline aperient:—

|                       |           |
|-----------------------|-----------|
| R. Sodii sulphatis,   | ʒj        |
| Potassii sulphatis,   | ʒj        |
| Potassii bicarbonat., | ʒj        |
| Lithii carbonat.,     | gr.xv. M. |

ft. pulv.

Sig.—One teaspoonful in a tumblerful of water, before breakfast.

In addition, he was ordered ten grains of the bicarbonate of potassium with water, thrice daily. As an external application, a powder composed of starch alone was directed to be dusted upon one lateral half of the body over the seat of the eruption, while a similar powder, with the addition of finely powdered camphor in the proportion of one drachm to the ounce of starch, was to be dusted over the other half of the body. The object in adopting this plan of treatment was to ascertain what advantages, if any, were to be gained by the camphor over the starch alone.

The result was striking. Already by the next day a great change for the better had taken place on both sides of the body; but it was found that the side on which the camphor

and starch were applied not only looked, but felt decidedly better than the other side. The moist patch about the flexure of the elbow had ceased oozing and looked less red and angry. The camphorated starch powder was now directed to be used exclusively, and to be spread upon cloths and bound on. No special diet was ordered. At the end of five days the patient had recovered sufficiently to be able to leave the hospital, though he remained under treatment as an out-patient for several days longer. At the time of his discharge from the ward, examination showed the eruption to be rapidly drying up, crusting and disappearing. Itching and burning were still present, but were not of such severity as to cause the patient to scratch. His general health had somewhat improved.—*Philadelphia Medical Reporter.*

## CHRYSOPHANIC ACID OINTMENT IN PSORIASIS.

Professor Neumann, the eminent dermatologist of Vienna (*Weiner Mediz Presse*, No. 14-16, 1878) having made extensive trials with this ointment at the General Hospital, Vienna, in the treatment of psoriasis, as first recommended by Mr. Balmanno Squire in this country at the latter end of 1876, is very favourably impressed with the results.

After giving due credit to Mr. Squire, and to the other English observers who followed him in this research, the Professor winds up an able paper with the following summary:—

1. That chrysophanic acid derived from goa-powder is an excellent remedy for herpes tonsurans, pityriasis versicolor, and psoriasis vulgaris.

2. Psoriasis in its earlier stages begins to disappear after a few applications of the drug, and in a far more unequivocal manner than under any other remedy that has ever yet been used against psoriasis.

3. Even inveterate forms of the disease can be abolished by means of chrysophanic acid, and it is quite the exception to find them oppose any protracted resistance to it.

4. Chrysophanic acid is a perfectly painless application to the diseased skin. The morbid phenomena occasioned by it on the healthy skin result apparently from the admixture of resinous matter with the acid.

5. As a result of this mode of treatment psoriasis belongs no more to those skin diseases which in so high a degree are a source of misery to the patient, and it has now become an easy matter to cure relapses. Every patient with psoriasis that I have as yet treated by this means gives the palm, without hesitation, to this method of treatment in preference to others. In any case, this, at the least, is emphatically true, namely, that the therapeutics of skin diseases have for the last ten years been enriched by but few remedies which have been

crowned by so eminent a success as the one in question.

6. There are other skin diseases also which are curable by chrysophanic acid, but upon these I will not report until I have accumulated more material.

7. Lastly, I desire to express a hope that this method, which I am the first to promulgate in this, my country, may be examined by other observers, and I do not doubt but that it will soon permanently assume its due rank amongst the treasures of therapeutics.—*Dublin Medical Press.*

#### THE TREATMENT OF EARACHE.

Dr. W. Cheatham, of Louisville, says, in a recent paper:—

When a patient complains of earache, and on examination with the speculum the drum is seen to be red, it is good practice to turn into the ear a stream of water as warm as it can be borne. This is best done by the aurial douche. Where this is not at hand, a Davidson's syringe may be substituted, first converting it, however, into a siphon. To do this, the vessel containing the water must be raised a short distance above the patient's head; the syringe then filled by compressing the bulb a few times, when, by lowering the tube, the water will continue to flow in a gentle stream, which is to be turned on the inflamed parts. A small rubber tube may be made to answer the same purpose. The douche, by whatever means effected, should be prolonged and often repeated.

Many cases of earache are met with, especially among children, which are relieved by having the patient turn the head well to the sound side, and pouring the ear full of very warm water. This may require to be repeated a number of times before relief is obtained, but in any event is always to be preferred to the various ear-drops, composed of laudanum, onion juice and the like. If this fails to relieve the pain, a leech should be applied a short distance inside the auditory canal, on its anterior wall; and when it falls away, the bleeding is to be encouraged by the hot water douche, or by flannels wrung from boiling water, industriously used for half an hour after. When the drum is found to be red and bulging, denoting fluid in the tympanic cavity, paracentesis should be immediately performed. The operation is exceedingly simple, and gives almost instantaneous relief. Should the fluid not flow as freely as may be desired, the patient is directed to practice Valsalva; or inflation should be made by Politzer's bag. In cases where the Eustachian tube is so entirely closed that air cannot be made to enter the middle ear, Seigel's otoscope, with very gentle suction, should be applied.

#### CHLORATE OF POTASH IN CATARRH OF THE BLADDER.

Prof. G. Edlefsen, of Kiel, publishes in the *Deutsch. Archiv. Klin. Med.*, xix., 1, 1877, an essay on the treatment of catarrh of the bladder by chlorate of potash. The view lately advanced that the best method of treating cystitis, even acute cases of it, consists in the introduction into the bladder, through the urethra, of water or medicated fluids, is not in accordance with his observation. The remedy he recommends is chlorate of potash, which never damages the stomach or any other organ, and substitutes turpentine perfectly in cases where turpentine cannot be given.

That the chloric acid salts, when administered internally, pass into the urine, was demonstrated in 1856 by Lambert. The value of the chlorate of potash in affections of the mouth and pharynx leads the author to their administration in affections of the bladder, the epithelium being in both cases alike of the pavement variety. The action of this remedy seems confined to this variety, as it has no effect upon the trachea or bronchial tubes. Its action is not to be explained by simple contraction of the muscular coat of the vessels, as it not only reduces the hyperæmia and catarrh, but also closes ulcers over quickly as if it exercised a specific action in the reproduction of epithelium. The author's results were extraordinary; still there are cases in which he failed with it, and was compelled to resort to turpentine and copaiba. He orders for adults usually: Potass., chlorat. 15.0, aqua dist., 300.0, of which a tablespoonful every two or three hours. He lays stress upon the prescription because it is necessary to bring the patient under the influence of the remedy quickly. Should the taste of the drug after long administration become insipid or sickening, it may be corrected by using cherry laurel as a vehicle (10.0—300.0); any syrup should be avoided. The puss begins to disappear from the urine after its use very quickly—an important difference from the action of salicylic acid—and the subjective distress is lessened or disappears even before the pus has entirely vanished.

#### TREATMENT OF GANGLION.

Dr. Bidder (*Cbl. f. Chir.*) recommends the injection of carbolic acid. An ordinary hypodermic syringe, having a sharp needle with a cutting edge near the point, is filled with a two or three-per-cent. solution of carbolic acid. A fold of the skin being pinched up, the needle of the syringe is thrust under it until the point reaches the capsule of the ganglion. A little slit is made through this with the sharp-edged point of the needle, and then, the latter being slightly withdrawn, the contents of the ganglion are expressed into the surrounding tissues. The point of the needle is then once more inserted into the now emptied ganglion, and a few drops of the carbolic acid solution are injected, and a simple water dressing is afterwards applied.

## BLOOD-LETTING IN PUERPERAL CONVULSIONS.

About twelve months ago we drew attention to the fact of there being some signs that this old-fashioned and almost obsolete remedy would again come into use, although of course not to the extent to which it was formerly employed, for it is only under special circumstances or in certain exceptional cases that we should venture to recommend the practice of general blood-letting. Among those practitioners who still think that with regard to this practice we have gone from one extreme to the other may be mentioned Dr. J. G. Swayne, Consulting Physician-Accoucheur to the Bristol General Hospital, whose experience of blood-letting in the treatment of puerperal convulsions certainly justifies the confidence which, in certain cases, he places in this remedy. He has from time to time brought forward his cases at the meetings of the Bath and Bristol Branch of the British Medical Association, and in the current number of the *Obstetrical Journal* is recorded one case in which the withdrawal of  $\frac{3}{4}$ xxx. of blood in a full stream from a large orifice was followed by immediate and permanent relief of all the symptoms. The convulsions had gone on for twelve hours before bleeding was resorted to. They had increased in frequency, until at last as many as three took place in an hour, notwithstanding that a full trial had been given to anæsthetics, in the form of hydrate of chloral and bromide of potassium, three-half drachms of the former and three drachms of the latter having been given. The bleeding appeared at once to produce a decided constitutional effect. The swollen livid face became pale, the breathing less stertorous, and the pulse soft and feeble, instead of full and throbbing. From that time the fits, which were recurring three times in an hour previously, only returned four times during the next ten hours, and were much mitigated in severity. Signs of labor also came on, and delivery was soon completed with the forceps. Dr. Swayne's experience of puerperal convulsions comprises thirty cases. In twenty-two of these bleeding was resorted to, the quantity of blood varying from ten to thirty ounces. In sixteen it was decidedly beneficial, and appeared to be the most efficacious remedy employed. In nearly every case it was speedily followed by a great diminution in the amount of albumen contained in the urine; and to this cause Dr. Swayne believes that blood-letting owes its great power as a remedy.

If the experience of Dr. Swayne were the only evidence in favour of our occasionally resorting to the lancet in the treatment of this terrible complaint, we should not perhaps have drawn particular attention to it. But it should be borne in mind that this was long the orthodox plan of treatment, and that even at the present day the occasional use of the lancet is recom-

mended by high authorities both in this and other diseases. All the great accoucheurs who practiced in the beginning of this century were unanimous as to the utility of bleeding in puerperal convulsions. As late as 1855, we are told in one of the most popular text books of obstetric medicine, to take away blood from the arm or temporal artery, largely, and in a full stream, provided the convulsions are of a sthenic form, with the head hot, face flushed, and the pulse full, firm, and frequent. We are even told to repeat the blood-letting if the paroxysms continue. Prof. Depaul even ventures in 1877 to say that copious bleeding from the arm is the only method of treating the disease which meets with success, and refers to an experience of two hundred and fifty cases in support of his opinion. Moreover, in respect of other diseases not more likely to be benefited by venesection than puerperal convulsions, there are some eminent authorities who are by no means so ready to wholly discard the use of the lancet as is now the case with the profession in general. In the volume of Ziemssen's "Cyclopædia of the Practice of Medicine" devoted to the consideration of Diseases of the Brain and its Membranes, we find that Nothnagel is by no means averse to the employment of blood-letting in certain forms of cerebral hyperæmia, or even apoplexy. Speaking of hyperæmia, he says that "the evidence afforded by the diminution in the severity of the symptoms, which follows, for example, an accidental nose-bleeding, seems to point too clearly to the propriety of this treatment; under certain conditions we could not get on without it." General indications, he remarks, for the use of the lancet are furnished by the presence of marked *turgor faciei*, strong cardiac impulse, and abnormal fullness and tension of the arteries. The same writer in speaking of the practice of blood-letting formerly universally adopted, and now almost as universally abandoned, in the treatment of hæmorrhagic apoplexy, very judiciously observes "that the true path which is followed by the majority of good practitioners lies evidently between the two extremes." The value of venesection in cases of cerebral hæmorrhage lies, in the opinion of Nothnagel, "in the fact that it brings about a diminution of the intracranial pressure (*i.e.*, indirectly, of course, by diminishing the arterial tension), and in this way its influence may be at times of capital importance. Where, in consequence of the intracranial pressure, and of the cerebral hyperæmia that accompanies the attack, paralysis of the respiratory or of the vagus centre is threatened, the rapid reduction of the quantity of the circulating blood may, by diminishing this pressure, have the effect of actually prolonging life, and this indication can only be fulfilled by venesection." We have made the above quotations not only because Ziemssen's "Cyclopædia" is



justly considered to be the most recent and most authoritative exposition of modern medicine, but because the above observations are far from being inapplicable to some forms of puerperal convulsions. It will be generally admitted that in many cases of this affection we have present those conditions which, in the opinion of Nothnagel, justify the use of the lancet—intra-cranial pressure, great arterial tension, congestion of the cerebral vessels, impeded return of the blood through the cerebral sinuses, overloading of the blood with carbonic acid gas, &c. These conditions are particularly prominent in the worst cases of the epileptic form of puerperal convulsions, as well as in those cases which are more of an apoplectic than of an epileptic nature; and although it very rarely happens that the disturbance in the cerebral circulation gives rise to actual extravasation of blood, the effect of that disturbance upon the brain and medulla oblongata is such as to predispose the system to a repetition of the convulsive paroxysms, and to the persistence of that comatose condition, the removal of which is one of the chief indications in the treatment. Owing to the age at which these convulsions generally occur, the coats of the cerebral vessels will bear a great deal of tension, and effusion into any part of the brain rarely takes place; yet sometimes this accident does occur, and at the meeting of the Dublin Obstetrical Society, Dr. Denham mentioned a case in which cerebral hæmorrhage was found after death, and in which he thought life might have been saved if the patient had been bled early in the convulsions.

In the foregoing observations we have merely mentioned one way in which bleeding may prove useful in the treatment of puerperal convulsions, but as respects this disease more especially, there is another light in which we may view the *modus operandi* of blood-letting, and which shows that this remedy may be found useful in other convulsions than those which occur in connection with childbirth. As we have just seen, Dr. Swayne attributes the efficacy of bleeding in puerperal convulsions to the effect it had of diminishing the amount of albumen contained in the urine; and the truth of this opinion is strongly corroborated by the result which has followed the treatment of a number of cases of uræmic convulsions and scarlatinal dropsy by copious venesection. Some of these cases will be found detailed by Dr. Robert Kirk, in the May or June number of the *Glasgow Medical Journal*, 1877, and others by Dr. Bramwell, of Perth, in the *Edinburgh Medical Journal* for July, 1875. In Dr. Kirk's cases the convulsions were severe, other means had been tried in vain, the convulsions ceased immediately after the bleeding, and the urinary secretion was restored, with or without the use of diuretics. For example, a girl aged nine,

was comatose after scarlatina, with puffed, pallid face, teeth clenched, a little foaming at the mouth, pulse 140, pupils moderately contracted and insensible, and rapid oscillation of the eyeballs. The case appeared a very unfavourable one, but about twelve ounces of blood were drawn from the arm, and in four or five hours afterwards the pulse had fallen from 160 to 80, she fell into a natural sleep, and ultimately recovered. In every case in which Dr. Kirk tried blood-letting in scarlatinal dropsy, the treatment proved eminently successful; while in thirty-two cases of the same disease in which Dr. Bramwell had recourse to general abstraction of blood, there was only one death, and that a case which was seen too late for treatment to be of any service. Amongst his cases were some of both pulmonary œdema and convulsions, and he also found that free diuresis set in forty-eight hours or less after blood-letting.

These facts, and we might have mentioned others of a still more striking nature, taken in connection with those that have been adduced by Dr. Swayne and other practitioners, must convince the most sceptical mind that, in properly selected cases, blood-letting is far from being such a perilous or useless remedy as many are now-a-days led to suppose, and that puerperal convulsions is not the only affection in which the judicious employment of that remedy may, under certain circumstances, be followed by the most beneficial results. At all events, the experience of those physicians to whose opinions we have just drawn attention, and the well-balanced judgment of so recent and eminent a writer as Nothnagel, are sufficient to inspire the young practitioner with some confidence in this remedy whenever he meets with cases in which a fair trial of it appears to be particularly indicated. — *Dublin Medical Press*.

#### THE VALUE OF SPONGES IN SURGERY.

Mr. Furneaux Jordan writes in the *British Medical Journal*:—

A sponge conveys, renews, or maintains antisepticity with signal convenience and efficiency. A soft, cleansed, moist, antiseptic, and sufficiently large sponge may be put over, or occasionally even within, the parts which have been recently injured or operated upon, with benefits so marked as to deserve pointed commendation. Such a dressing apparently secures all the conditions which favor the healing process; and all that we can do is to control conditions. We have no surgical charms, royal touch, or prayers which are able to heal.

A sponge exerts a soft, uniform, diffused, elastic, and measurable pressure. Slight pressure will keep a wound clean; moderate pressure keeps up efficient drainage of all deep-seated fluids, and renders the ordinary drainage tube, as a rule, unnecessary. The

drainage (and pressure) of a sponge is diffused and complete; the drainage of a tube is local and incomplete. In many cases, where I have used a tube with a subjacent sponge, I have found, on removing the first sponge, after some days, all the parts healed, except the locality of the tube. In similar cases, where the tube has not been used, the healing has been complete. There is one structure which, in my experience, strongly resents the presence of an india-rubber tube passed through its substance; it is the female breast, multiple abscesses arising in the vicinity of its tract.

Moderate sponge pressure also keeps the deep parts in apposition, and thus promotes the deeper solid union; a greater virtue no dressing can possess. A little more, though not at all severe, pressure arrests hemorrhage from all except the larger vessels; even the latter might, if necessary, be held in check for a considerable time. In operations and injuries where hemorrhage is free, and from many and not large vessels, as in wounds of the palm, indeed, in any operation or injury involving the hands and feet, the advantages of a sponge and bandage are clearly seen. In operations on the breast, especially where axillary glands require removal, I look on a large sponge as my best friend. In some cases such as these a bit of sponge put inside the wound (Mr. Lister's writings first suggested this to me), the margins being drawn together, or a large sponge placed thereon, instantly stops all bleeding. Here I should change the first dressing as soon as the probability of primary and reactionary hemorrhage had passed away, so that deep union might not be hindered. There is probably some physical peculiarity in sponge which tends to arrest hemorrhage, independently of mere pressure. Protracted pressure with lint or cotton, sufficient to arrest hemorrhage, would cause sloughing; it is not so with sponge pressure. Sponge "bites" the skin, and thus keeps the superficial parts in place, while its elastic pressure keeps the deep parts together. I will now merely hint at some other of its qualities. Sponge may be kept very wet or slightly damp, hot or cold, small or large, by merely altering the character and the amount of the fluids which may be applied to it; all this is possible without removing the sponge. The lotion may be nearly boiling, or it may be constantly iced. Fluid may be applied with any frequency; it may be medicated with any approved agent. Lotions which give deposits, as those containing lead, are not so suitable, as they harden the sponge—a condition which can rarely, if ever, be necessary. If the sponge dressing require to be prolonged more than a few days, the lotion must not be of a character or a strength to unduly irritate the skin.

Turkey sponge is better for smaller wounds and operations; in larger lesions the honeycomb is more manageable. Sponge dressings may be removed frequently, or, which is much more important, very unfrequently. The softness and bulk of damp sponge protect from movement, friction, blows, or

other injury. Sponges take any shape, may be adapted to any surface, or cut to any size. Two or more (stitched together or not) may be used when one is not large enough or only small ones are available.

It is well to have separate suitably-shaped and prepared sponges for dressing; but if this be overlooked or be inconvenient, the operation sponges may be used. Sponges which have been used, if completely cleaned and disinfected, are even better than new ones.

How long should we continue the sponge-dressing? Not long; until all danger of primary and recurrent bleeding has ceased; until deep union is fairly established, and there is little fear of the separation of parts; until (which is much the same thing) the discharges have become slight and the wound is mainly superficial. All these results I very frequently find on removing the first dressing, which has remained some days—three, four, six, eight, or ten.

In amputations of the limbs, sponges, one or two, may be readily made to cover the incisions, support the deep parts, check hemorrhage, drain, and act as splints. In removal of the breast and tumors generally, the sponge dressing has special advantages. The sponge should be large; say, in a woman of medium size, ten or eleven inches long, five or six wide, and four or five thick. It should be placed directly over the stitches or strapping; indeed, it is one of the merits of the sponge that it can be placed over any other contrivance. If strips of plaster be needed to relieve tension, they should be long, say from over the shoulder to near the groin, when the slight moisture of the sponge will not spoil their adhesion. A few neat and firm turns of wide, thin, smooth bandage are better than a large number in several ways, especially in the medication or antiseptication (may I say?) of the sponge. During the few years I have used sponge dressing, I have not had a single instance of early recurrent or later reactionary, or of secondary hemorrhage. I scarcely ever tie a vessel. One or two may be twisted or compressed a few minutes by spring forceps; but patient pressure for a time, with relays of well-wrung sponges within the wound, rarely fails to stop primary hemorrhage.

In the deep excision of cancers from mucous outlets—a branch of surgery in which it falls to my lot to have much experience—I should be much at a loss if I had not at hand my large sponge with its antiseptic, styptic, compressing and draining properties. A few months ago I removed a cancerous penis as far down as the triangular ligament in the perineum (splitting the scrotum to do so, the man preferring to retain the testes); a sponge with a catheter passed through its centre, stopped the bleeding, dressed the wound, and kept it antiseptic, all at once.

I need not detail every operation in which sponge dressing is of benefit; I will briefly refer to a few only. I have just had striking evidence of its utility in rephining. Twenty-one days ago a young man

was brought into the Queen's Hospital with a cut, and therefore a comminuted and depressed fracture of the right parietal bone, caused by a falling slate. Brain was oozing out, and as much as would fill a walnut-shell escaped. Left hemiplegia was marked, but not complete. I trephined, and removed numerous fragments and a bit of felt hat, leaving a gap two inches long and an inch and a half wide. The soft parts were very loosely adjusted, and well covered and overlapped by a soft sponge kept constantly moist with terebene, and fixed by one strip of adhesive plaster twenty inches long and three inches wide. On this, the fourteenth day, his state could not be more favorable.

In wounds generally, in compound fractures, after operations for caries or necrosis, after opening abscesses, superficial or deep, the sponge dressing is of ready utility.

After operations for hernia, a large antiseptic sponge, under a few turns of spica bandage, forms an ideal dressing, which at once gives elastic trans pressure, cleanliness, drainage and antisepticity.

After lithotomy, when there is free bleeding, there is no mechanism which equals in accessibility, simplicity and efficiency, an elongated bit of sponge, a kind of sponge tent, passed by the side of an elastic tube or catheter. I have now in the hospital a man, aged seventy-five, who is convalescent from lithotomy. The stone was very large, the incision necessarily free, the hemorrhage great, and the patient naturally feeble; after a few spoonfuls of iced water, I put a large elastic catheter through the wound, and by its side a sponge tent of the size of my finger. In a few moments the bleeding ceased, not to return, and the urine shortly came through the catheter. All went on well, save that severe signs of senile exhaustion appeared after seven or eight days; these were successfully checked by repeated alteration in position, and even partially clothing the patient; the risk of a permanent fistula from getting up too soon seemed better than death. In lithotomy wounds, as elsewhere, when the sponge is put within the wound, it speedily creeps into every corner, crevice or recess from which blood may flow. It is on this principle that an ordinary uterine sponge-tent, passed along the floor of the nose, as recorded by a surgeon whose name I forget, checks epistaxis immediately, without time, trouble or apparatus.

**AFTER-TREATMENT OF TRACHEOTOMY CASES.**—Vogt (*Abh. f. Chir.*, 1878, p. 158; from *Deutsche Med. Wochens.*), proceeding from the fact that with the present methods of treating tracheal croup most children perish, even after operation, from continued formation of false membrane, suggests glycerin as a means of hindering the formation of the membrane. It is known that when this substance is applied to the mucous membrane a profuse watery serous secretion is excited; and this is relied upon by Vogt to remove or prevent the adhesion of the false membrane. In the case of a little six-year-old girl treated in this way a cure resulted. Glycerin mixed

with an equal quantity of water was inhaled, by means of an inhalation apparatus connected with the tracheal tube, every half hour. Vogt has also used this treatment in recent cases of croup, where tracheotomy has been thought unnecessary or undesirable. Disinfection of the original patch in the pharynx by means of chlorine or bromine water preceded the use of inhalation. X.

#### THE TREATMENT OF NEURALGIA.

The following cases and treatment of neuralgia are given by Mr. E. M. Boddy, in the *Medical Times and Gazette*, London:—

**CASE 1.**—John S., aged fifty-five. Patient, a farmer, had been troubled with obstinate recurrent attacks of facial or definite neuralgia, and had tried various remedies, but had obtained no relief. He was in robust health, and there was nothing to be seen or felt on either the upper or lower jaw, and there were no decayed teeth. The attacks would come on violently and without any warning, and the pain was so excruciating that he said it made him "feel mad." After taking the opium and arsenic he fell into a profound sleep, and on awaking the pain had entirely left him. Now, in this case, relief was almost immediately afforded, and no further treatment was necessary, for the attack no doubt depended upon "some obscure irritation of the fifth pair of nerves," and was not caused by the health being out of gear.

**CASE 2.**—Henry H., aged forty, had been suffering some weeks previous to my seeing him, from the most excruciating attacks, and there were no carious teeth to account for them. As he was out of health, I treated it as a case of anæmic neuralgia, and so I put him on a course of quinine and iron, which gave him no relief. At last he had such a severe attack that he was like one bereft; but the pain was immediately alleviated by the opium and arsenic, and left him, he said, "like a miracle." I now recommenced the tonic treatment, and he very soon regained his ordinary health. In this case the neuralgia simply resulted from an "obscure irritation of the fifth pair of nerves," accompanied with debility.

**CASE 3.**—Charlotte B., aged eighteen. Patient was what one might term in first-rate health, and strange to say, had never had the toothache. One evening, without any assignable cause, she was attacked with the most "horrible pain" in the face; had never experienced it before. I administered the opium and arsenic, and the pain at once left her. The next day she had another attack, which immediately succumbed to the remedy.

**CASE 4.**—Annie H., aged twenty-two. Patient had been irregular from puberty, and for the last six years had been subject to facial or definite neuralgia, and no remedy had afforded her the slightest relief. She was a well-formed

girl, but was decidedly chlorotic and anæmic. The first dose relieved the pain slightly; the second entirely removed it, for she slept soundly, and there was no vestige of it on awaking. I now treated her general health by administering purgatives and tonics, such as iron and quinine. When I last saw her she had had no recurrence of the neuralgia, the catamenia were regular, and her general health had greatly improved.

These four cases which I have selected from many others of which I have notes, are quite sufficient to shew the efficacy of the combination of opium and arsenic in the treatment of this disease. Three of them are very good specimens of what I call definite neuralgia, and the last was of the same kind, though partly owing its origin to some uterine derangement. There is one very noticeable fact: they all derived marked benefit from the remedy; it also quickly relieved them of an agonizing pain, prevented its return, and no ill consequences resulted; and what is greatly in its favor, the opium promotes rest, which is so necessary, and the sufferer awakes up feeling almost a new being, especially if the pain has been of long continuance.

The form of definite neuralgia which arises from hysteria is also amenable to opium and arsenic; but then it is desirable to give the patient a nervine sedative, such as the bromide of potassium or the tincture of valerian, after the neuralgic pain has subsided. The following is the mixture I always give:

|                 |           |    |
|-----------------|-----------|----|
| R. Liq. arsen., | 3 ss      |    |
| Tinc. opii,     | 3 iss     |    |
| Aquæ,           | ad. 3 iij | M. |

Sig.—One tablespoonful to be taken when required.

The strength may be increased in very violent cases, but I have generally found the above sufficiently strong.

#### GLYCERIN IN THE TREATMENT OF INTERNAL HEMORRHOIDS.

Dr. George B. Powell writes in the *Practitioner*, April, 1878:—

The results of the administration of glycerin have been striking and satisfactory. My first case was so extraordinarily rapid and successful, that I hesitated to publish it till further trials had convinced me that the results obtained were due, undoubtedly, to the drug.

Mrs. B., aged fifty-eight, requested my attendance on January 16th, to prescribe for a troublesome cough, to which she had been of late years subject at this particular season; there was simple catarrh of the larger bronchi, with scanty expectoration; she likewise intimated, parenthetically, that she had been for years affected with the "bleeding piles," and for the last two years the tenesmus and discharge of slimy mucus

mixed with blood, had been particularly severe, running from her in bed, and "shooting from her when she coughed." She did not expect any relief from the latter affection, but thought if her cough was improved it would give her a modicum of comfort. From her own statement, she had had no proper sleep for two years, in consequence of the tenesmus and constant irritation in the lower bowel. I may add, from her own report, everything had been tried to relieve the tenesmus, suppositories included, without effect. I prescribed the following:—

|                |             |    |
|----------------|-------------|----|
| R. Glycerinæ,  | 3 jss       |    |
| Acid. citric., | 3 ij        |    |
| Morph. acet.,  | gr. j       |    |
| Vin. ipec.,    | 3 ij        |    |
| Aquæ           | ad. 3 viij. | M. |

One ounce ter die.

My next visit was on the 19th, and I was agreeably surprised to find the tenesmus and discharge entirely ceased, and although the cough had not improved, she could pass a comfortable night, and "felt better than she had done for years." The cough continuing distressing, she desired to discontinue the medicine which had exercised so beneficial an influence over the lower bowel, as she considered the sudden stoppage of the discharge made her cough worse. To a certain extent she was right, for as the cough improved, all the former painful symptoms reappeared, though in a minor degree. She then returned to the use of the glycerin, and after two bottles she expressed herself as well as ever she was, and up to this date, March 9, she has continued well.

My next experience was in a case of a man of intemperate habits, who, "after a spree," invariably suffered from bleeding piles, with great pain on defecation. I prescribed the glycerin with citric acid and tincture cardam. co., and saw nothing more of him for three weeks, when I met him accidentally, and on enquiry found he had been completely cured by the one bottle. In two other cases of hemorrhoids, one occurring in pregnancy, great relief was afforded.

I am convinced we have in glycerin a therapeutic agent of great value. I am inclined to believe its action to be of a specific nature, but its *modus operandi* I am unable to speculate upon with my present experience.

In the hemorrhoids of drunkard's it will be found perfectly reliable and effective, and administered with citric acid and tincture cardam. co. forms a pleasant and agreeable mixture.

#### THE USE OF OPIUM IN CEREBRAL ANÆMIA AND AFFECTIONS OF THE HEART.

M. Huchard has pointed out, in the *Journal de Thérapeutique*, the good results obtained by the administration of opium, in patients suffering from insufficiency or aortic obstruction. In the course of certain affections of the heart, when

the attacks of suffocation and dyspnoea have acquired an extreme intensity, injections of morphia are of the greatest service.

To support this view, M. Huchard, besides his own personal observations, quotes the facts published by Levy, of Vienna, 1867, by Renauld, in 1874, and by Vibert, in 1875. The communication of M. Huchard presents two points deserving of attention:—

1st. The popularization of the employment of opium in affections of the heart.

2nd. The theory by which the good results are explained.

M. Huchard recognizes that other medical men have perscribed morphia in affections of the heart, but his desire has been to fix the indications and contraindications of the method.

It has been known for a long time that opium in doses of from one to two centigrammes, among other physiological effects, produces slight excitement of the circulation, exhilaration of the spirits, animation of the face, and an increase of muscular power; but if, after the appearance of well-marked phenomena of excitement, the dose be increased from five to ten centigrammes, depression of the circulation and tendency to sleep supervene. Professor Gubler, in his *Commentaries*, insists on the utility of opium in want of stimulation of the nerve centres, due to impoverished or altered blood; and Dr. Vibert, at the end of a memoir published in the *Journal de Thérapeutique*, 1876, concludes that the previous employment of injections of morphia in the operation of thoracentesis, and even in all operations giving rise to syncope, prevents the occurrence of such accidents. M. Huchard employs opium in the hope of utilizing its hyperæmient properties on the nerve centres, and particularly on the brain. In patients suffering from aortic obstruction or insufficiency, with symptoms of suffocation, dyspnoea, cold sweats, pallor of the face, etc., he has seen these formidable symptoms disappear after the injection of one centigramme of morphia.

If opium be useful in cases of aortic affection accompanied by vertigo, buzzing in the ears, tendency to giddiness, cephalalgia, it is because such symptoms are those of cerebral anæmia, and that cerebral ischemia is a frequent complication, not only of aortic insufficiency, but of aortic lesions in general. Hence, the administration of opium is indicated in the course of affections in which cerebral ischemia is equally met with.

In M. Huchard's opinion, as in that of Professor Gubler, opium may be used in certain forms of anæmia, as it acts as an excellent tonic owing to its congestive action on the brain. It may be prescribed for cachectic or phthisical patients, for in such cases, besides the tonic action of opium recognized by Sydenham, we also utilize the power of this medicine to calm the dyspnoea and the cough.

**HISTORICAL ITEM.**—Most persons regard Homœopathy as a system of modern origin, dating back only to Hahnemann, who brought it into notice about seventy-five years since; Dr. Meryon's History of Medicine furnishes us, however, with the following:—"Gregory I. (surnamed the Great), who filled the papal throne A.D. 590 to 604, and whose name is celebrated in English history from his mission for the conversion of our Islands, affected the most supreme contempt for profane literature, as well as for the arts and sciences; but curiously enough, it was his fate to help most materially the cause to which he was so vehemently hostile; for, although he cared not for science, he endeavored to propagate his faith in Christianity by sending missionaries to all parts of Europe, many of whom, like Theodoric in England, encouraged the study of literature and medicine. A most remarkable passage occurs in the writings of Gregory, which is probably the earliest, and certainly the most unequivocal enunciation of one great dogma of the system of Homœopathy, and tends to confirm the notion that that system was practised at this early period. It runs thus:—'*Mos medicinæ est ut aliquando similia similibus, aliquando contraria contrariis curet. Nam sæpe calida calidis, frigida frigidis, sæpe autem frigida calidis, calida frigidis sanare consuevit.*' The identity of words renders it impossible to read the above paragraph without a suspicion that an old and obsolete tenet may have been reproduced to the world under the garb of a new discovery; but if it be not *absolutely* true that human nature is destined to renew its acquaintance from time to time with exploded doctrines, just as we renew our acquaintance with by-gone diseases, it is an apt illustration of the proverb advanced by an authority far more unerring than we can pretend to, that 'there is no new thing under the sun.'"

#### THE TREATMENT OF ULCERS.

Dr. Mandelbaum, of Odessa, says (*Berl. Klin. Wochenschrift*, No. 10, 1878) all ulcers of the leg and elsewhere, can be cured by the following method:—If they are very deep, with much loss of tissue, and with undermined, uneven, callous edges, they are first to be scraped away until healthy tissue is reached, with the modification of Volkmann's spoon as suggested by Hebra; they are then to be covered for several days with a thick layer of iodoform until fresh granulations spring up (as they are certain to do), and until the base of the ulcer has reached the level of the surrounding skin. When this point in the healing process is reached, the ulcer is to be strapped daily with equal parts of mercurial and soap plaster of rather soft consistence, and carefully and evenly applied. Shallow ulcers, covered only with pus, require no scraping, but can be at once treated with iodoform.



# McKESSON & ROBBINS'

## PILLS AND GRANULES,

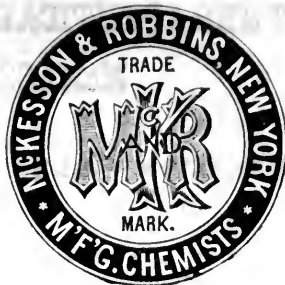
OF THE

U. S. PHARMACOPIA &amp; OTHER RELIABLE FORMULÆ,

GELATINE-COATED,

Process and Machinery Patented,

91 &amp; 93 Fulton, 80, 82 &amp; 84 Ann Sts., N. Y.



## NEW THERAPEUTICAL NOTES.

### CHARCOAL, WILLOW, ..... 5 grs.

The value of pure powdered Willow Charcoal in Dyspepsia, Indigestion and all affections arising from derangements of the stomach, such as Headache, Heartburn, &c., is well known. Its value must necessarily be much increased, since it is, for the first time, presented in a convenient, reliable and unobjectionable form, in our Gelatine-Coated Pills.

### IRON, DIALYSED, ..... 2 grs.

Made from Merck's scales or plates of Dialysed Iron, and, about 20 times the strength of the Solutions in market.

### SALICIN, ..... 2½ and 5 grs.

Salicin is becoming more and more favorably known in the treatment of Rheumatic affections, also as a Tonic, Astringent, and Anti-Periodic, and is best exhibited in our Gelatine-Coated Pills. In Acute Rheumatism, Salicin has been found very efficacious, and according to "The Lancet," not less certain, than Quinine is for the Ague. In large doses, it has been claimed to be an absolute specific in Cornitis (suppurative). Price, reduced.

### MONOBROMATED CAMPHOR, ..... 2 and 3 grs.

Is now being considerably used in treatment of Spermatorrhoea; strongly recommended in cases of Cerebral-Anæmia; used successfully in Infantile Convulsions from teething; Hysteria; Headache from over study or nervousness, and Nymphomania. (Dose, 3 to 4 grs.)

### CALCIUM, SULPHIDE, ..... 1-10 gr.

Strongly recommended "in cases of Scrofulous and other unhealthy sores, Glandular Enlargement, Boils occurring in crops, &c." In many skin diseases, it is strongly indicated, being not only Anti-parasitic and Anti-herpetic, but also stimulant and tonic.

An eminent physician, who has given much attention to the use of Sulphide of Calcium and cites several very interesting cases of cures of Abscesses, through its medium. In his words: "The Sulphide of Calcium is indicated in Scrofulous and unhealthy sores and Glandular Enlargements, in Boils appearing in crops, and in carbuncles—in any diathesis with a tendency to Abscesses with suppuration."

### CERIUM, OXALATE, ..... 1 gr.

Used as a remedy in the sick stomach of pregnant women, and in the vomiting of pregnancy, as well as in Phthisis, Hysteria, Pyrosis and Atonic Dyspepsia. (Dose, 1 to 3.)

### PHOSPHORUS, ..... 1-100, 1-50, 1-30, 1-20, 1-12 gr.

The pure transparent Gelatine we use is in no degree porous, it preserves the Phosphorus perfectly in the free state; while sugar, owing to its crystalline nature, is very porous, and will admit of rapid change in substances, of a delicate character, covered with it. We have the Phosphorus in state of solution in the excipient we employ, this insures a gradual elimination of the Phosphorus in the stomach, thus avoiding the severe irritation that is so often experienced after taking the ordinary Phosphorus Pills, which are prepared by mixing the Phosphorus in substance with the excipient, in which small fragments of Phosphorus often remain. Note remarks by Dr. Squibb, in his paper before Am. Pharm. Ass'n, Sept., '76, in which he states that Phosphorus should never be administered in substance, and if a coating be used, he commends Gelatine.

Many of the most eminent physicians throughout the country, among whom are leading specialists in the treatment of Neurotic diseases, assert that McKesson & Robbins' Phosphorus Pills are the most rational medium yet found for exhibiting Phosphorus.

### PHOSPHORUS COMPOUND, McKesson & Robbins' Pills, ʒss, ʒv & ʒss gr.

### PHOSPHORUS COMPOUND AND IRON, McKesson & Robbins' Pills.

CAUTION!!—SPECIFY McKESSON &amp; ROBBINS'.

Every drug and chemical used in McKesson & Robbins' Pills are thoroughly tested by a competent chemist, and the Pills repeatedly analyzed to prove correctness in the synthesis.

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The Spheroidal or Capsule shape of McKesson & Robbins' Pills is the best adapted to the throat, and obviates the sickening sensation so universal in swallowing a round pill.

## THERAPEUTICAL NOTES ON SOME SPECIALTIES IN McKESSON & ROBBINS' G. C. PILLS.

### ERGOTIN PILLS, ..... 3 gra.

We manufacture our Ergotin with great care from the best quality of fresh, selected Ergot, and it contains, in the most potent form, all the active constituents of Ergot of Rye, each grain representing 10 grains of Ergot, and each pill being equal to half a teaspoonful of official fluid extract. The value of Ergotin, in the place of the crude drug and the fluid preparations, is conceded; and it is being largely administered both in this country and in Europe. It has taken a prominent place in the treatment of Neurotic diseases. Many of our most reliable practitioners, and particularly those of extended experience in Gynaecology, assert that they have never found a preparation of Ergot, in which, by experience, they felt as much confidence as in McKesson & Robbins' Ergotin Pills. The advantages of prescribing it in this form will be readily acknowledged. (Dose, 1 to 3.)

We offer our Ergotin, prepared specially for hypodermic use, in one-ounce bottles.

### COCA EXTRACT, ..... 1 gr.

McKesson & Robbins' Solid Extract, made from freshly imported leaves, is used in these pills. As the leaves become almost inert with age, a preparation of this nature is necessary to enable the physician to judge correctly of the value of this remedy. Coca Erythroxyton is a South American plant, used by the natives as a substitute for tea, coffee, tobacco, hashish and opium of other countries. It imparts vigor to the muscles as well as to the intellect, and enables the partaker to endure great fatigue with ease. The feeling of exhilaration, accompanying its use, is said not to be followed by any depressing effects.

### JABORANDI EXTRACT, ..... 3 gra.

Made of McKesson & Robbins' Solid Extract. These pills present a much better and more acceptable form of administering this powerful Diaphoretic and Sialagogue, than any of the liquid preparations. Valuable in Rheumatism and all Syphilitic troubles of long standing. (Dose, 1 to 3.)

### PHOSPHIDE ZINC, ..... 1-6, 1-4 and 1-2 gr.

The Phosphide of Zinc has been very successfully used by Drs. Hammond (see Dr. H.'s last book), Routh, and other prominent authorities on treatment of brain diseases, all of whom assert its efficacy. It has been used with remarkable results in severe cases of Neuralgia (see paper by Dr. Adolphus, St. L. Med. Jour., XIII. 471). P. Vigier, *Bull. Gen. de Therap.*, states that Phosphide of Zinc is more prompt and reliable in its action than free Phosphorus.

### SANDAL WOOD EXTRACT, ..... 1 and 2 gra.

These pills contain both the oil and resin existing in Sandal Wood, are believed to be superior to the oil alone, and are more convenient of administration. The Extract is manufactured from the wood, in our laboratory.

### SOLIDIFIED COPAIBA, WITH OLEO-RESIN CUBE PILLS, ..... 3 and 5 gra.

We prepare both these ingredients in our own laboratory, with great care, and can assert their superior quality. The value of the Oleo-Resin Cubeb often offered in market is very slight, due to the fact that the largest proportion is powdered Cubeb Berries.

### QUININE, SULPHO-CARBOLATE, ..... 1, 2 and 3 gra.

This salt of Quinine has been very much used in some of our extreme malarial districts during the past two years. Those, who have tested it very carefully, claim that it possesses a most positive specific action in the treatment of Fever and Ague, and has proved itself eminently superior to the Sulphate of Quinine in all malarial fevers.

## PHYSICIANS' POCKET CASES FOR PILLS.

Having received many inquiries for our Gelatine-Coated Pills and Granules put up in a form convenient for practitioners, and, not finding any of the ready-made pocket cases in market desirable, we have devised a number of forms and sizes of our own. The number and variety of the formulas of our Pills, together with their ready solubility have, to a great extent, obviated the necessity of carrying the bulky medicine chest, with its solution and powders.

Circular, with cuts and prices, mailed upon application.

# McKESSON & ROBBINS' GRANULES.

|                        |                               |
|------------------------|-------------------------------|
| ACONITIA,              | 1-60 gr.                      |
| ARSENIOUS ACID,        | 1-50, 1-40, 1-30, 1-20 gr.    |
| ATROPIA,               | 1-60 gr.                      |
| BELLADONNA EXTRACT,    | 1-4 gr.                       |
| CALCIUM, SULPHIDE,     | 1-10 gr.                      |
| CODEIA,                | 1-16, 1-5 gr.                 |
| CORROSIVE SUBLIMATE,   | 1-40, 1-30, 1-20 gr.          |
| DIGITALIA,             | 1-60 gr.                      |
| MERCURY, BIN-IODIDE,   | 1-25, 1-16 gr.                |
| MERCURY, PROTO-IODIDE, | 1-5, 1-4, 1-2 gr.             |
| MORPHIA, ACETATE,      | 1-8, 1-4 gr.                  |
| MORPHIA, SULPHATE,     | 1-16, 1-10, 1-8, 1-6, 1-4 gr. |
| MORPHIA, VALERIANATE,  | 1-8 gr.                       |
| PODOPHYLLIN,           | 1-8, 1-4 gr.                  |
| QUINIA,                | 1-2, 1-4 gr.                  |
| STRYCHNIA,             | 1-60, 1-40, 1-30 gr.          |
| SULPHUR, IODIDE,       | 1-25, 1-10 gr.                |
| TARTAR EMETIC,         | 1-100, 1-20, 1-4 gr.          |
| ZINC, PHOSPHIDE,       | 1-6, 1-4, 1-2 gr.             |

Physicians have experienced the need of a reliable and more pleasant form for administering these more potent remedies. The want of reliability, as exhibited in the Granules of the market by the varying action following their administration, has caused them to be avoided—and very justly—by most practitioners, who have preferred rather to use solutions, and trust to the custom of dropping, or using a teaspoon to measure their portions, although nearly as uncertain, owing to great difference in the sizes of teaspoons, and the fact that drops vary with the conditions and form of surface, from which they flow.

In our preparations, we have taken special precautions by enforcing our system of checking the weights, and, at large expense, have had our machines for division of the substances so carefully and correctly constructed, as to insure an exactness never before maintained in this class of preparations. We can, therefore, afford assurance to physicians of correct weight and perfect division. Our Granules have been appreciated and are being extensively used by the profession. Be careful and see that "McKesson & Robbins" is on the label.

A physician in St. Louis, who has for some time been using our Pills, prescribed "**Gelatine-Coated Phosphorus Pills,  $\frac{1}{16}$  gr.**" intending to have the **McKesson & Robbins Pills** dispensed, but did not perceive the usual effects after administering them to the patient. Upon investigation, he found the Pills resembled ours somewhat in external appearance, but on cutting one open, he found it contained **hardly a trace of Phosphorus**. The doctor went to the druggist, who had dispensed the prescription, and found that, not having our Phosphorus Pills in stock, **he had dispensed an imitation**; the druggist claimed that he was warranted in so doing, as the physician had not taken the precaution to put the name **McKesson & Robbins** upon his prescription, although the physician had been in the habit of specifying our pills, and the druggist knew it. We have had our attention called to several cases of this character, regarding the Quinine Pills, Morphia Granules and others, when, on **failing to obtain results**, the physicians have found that they **were being imposed upon by imitations**; this has induced them to write "**McKesson & Robbins' C. C. Pills**" in full upon their prescriptions and add, "**send no others.**" We have full lines of our Pills in all of the large, and in most of the small cities, and there is no excuse for substituting imitations.

Price Lists furnished upon application. See list of formulas, last page.

Private Formulas, of 3,000 or more Pills, Made and Coated to Order.

**McKESSON & ROBBINS, 91 Fulton Street, New York.**

CAUTION!!—SPECIFY McKESSON & ROBBINS'.

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## Formulas of McKesson &amp; Robbins' Pills, (Gelatine-Coated.)

|   |   |   |
|---|---|---|
| Acid, Arsenous, 1-50, 1-40, 1-30 and 1-20 gr.<br>*Acid, Salicylic 2-12 and 5 grs.<br>Aloes, U. S., 4 grs.<br>Aloes and Assafetida, U. S., 4 grs.<br>Aloes and Iron, 3 grs.<br>{ Pulv. Aloes, Soc., 1-5 gr. }<br>Pulv. Zingib. Jam., 1 gr.<br>Ferri Sulph., Exsic., 1 gr.<br>Extract Conii, 1-2 gr.<br>Aloes and Myrrh, U. S. 3 grs.<br>Aperient.<br>{ Ext. Nucis Vom., 1-3 gr. }<br>Ext. Hyoscyami, 1-2 gr.<br>{ Ext. Coloc. Comp., 2 grs. }<br>Assafetida,<br>{ Assafetida, 1-12 grs. }<br>{ Pulv. Saponis, 1-2 gr. }<br>Assafetida, U. S. 4 grs.<br>{ Assafetida, 3 grs. }<br>{ Pulv. Saponis, 1 gr. }<br>Assafetida and Nux Vomica.<br>{ Assafetida, 3 grs. }<br>{ Ext. Nucis Vom., 1-4 gr. }<br>*Atropia, 1-60 gr.<br>*Belladonna Extract, 1-4 and 1-2 gr.<br>Bismuth, Subnitrate, 3 and 5 grs.<br>Blue Pill, U. S., 1-2, 1, 3 and 5 grs.<br>Calomel, 1-2, 1, 2, 3 and 5 grs.<br>Camphor and Hebanene.<br>{ Camphora, 1 gr. }<br>{ Ext. Hyoscyami, 1 gr. }<br>*Camphor, Mono-Bromate, 2 and 3 grs.<br>Cannabis Indica Extract, 1-2 gr.<br>Cathartic Compound, U. S. 3 grs.<br>Cathartic Vegetable,<br>{ Ext. Col. Comp., pulv., 1-12 grs. }<br>Res. Podophylli, 3-8 gr.<br>Res. Lepidandri, 1-8 gr.<br>Jalape, pulv., 1-4 gr.<br>Aloes Socotrin, pulv., 1-2 gr.<br>Ext. Hyoscyami, 1-4 gr.<br>Ol. Menthae Pip.<br>Chinoidine, 1-2, 1 and 3 grs.<br>Cinchonin, Sulphate, 3 grs.<br>Cinchonin, Sulphate, 1, 2, 3 and 5 grs.<br>Colocynth Comp. Extract, 2 grs.<br>Colocynth, Ipecac and Blue.<br>{ Ext. Coloc. Comp., pulv., 2 grs. }<br>Pulv. Ipecacuanha, 1-6 gr.<br>{ Pulv. Hydrarg., 2 grs. }<br>Cook,<br>{ Pulv. Aloes, Soc., 1 gr. }<br>Hydrarg. Chlor., Mite, 3-4 gr.<br>Pulv. Rhel., 1 gr.<br>{ Pulv. Saponis, 1-4 gr. }<br>Copaliba, 3 grs.<br>Copaliba and Oleo-Resin Cubeba, 3 grs.<br>{ Pil. Copaliba, 2 grs. }<br>{ Oleo-Resin Cubeba, 1 gr. }<br>Copaliba and Oleo-Resin Cubeba, 5 grs.<br>{ Pil. Copaliba, 3 grs. }<br>{ Oleo-Resin Cubeba, 2 grs. }<br>*Corrosive Sublimate, 1-40, 1-30 and 1-20 gr.<br>*Digitalis, purg., 1-60 gr.<br>Dinner (Cofa's).<br>{ Pil. Hydrarg., 1-15 grs. }<br>Pulv. Aloes Soc., 1-15 grs.<br>Pulv. Jalape, 1-15 grs.<br>{ Ant. et Pol. Tart., 1-50 gr. }<br>Dinner (Lady Webster's).<br>{ Pulv. Aloes, Soc., 1-4 grs. }<br>Pulv. Mastiches, 3-4 gr.<br>{ Pulv. Rosae Gallicae, 3-5 gr. }<br>*Emmenagogue.<br>Ergotin, 1 gr.<br>Ext. Helieb. Nig., 1 gr.<br>Ferri Sulph., Exsic., 1 gr.<br>Aloes Soc. Pulv., 1 gr.<br>Ol. Sabinæ, 1-4 gr.<br>*Ergotin, 3 grs.<br>Ferruginous (Bland).<br>{ Ferri Sulph., 1 gr. }<br>{ Potassæ Carb., aa }<br>*Grindella Robusta Extract, 3 grs.<br>*Guaraura Extract (Pruillonia), 3 grs.<br>*Hebane Extract, 1 gr.<br>Hepatic.<br>{ Pil. Hydrarg., 3 grs. }<br>{ Ext. Coloc. Comp., 2 grs. }<br>{ Ext. Bellad., 1-4 gr. }<br>Hooper's, 2-12 grs. | Hypophosphites, Compound.<br>Calcil Hypophos., 1 gr.<br>Sodil " 2-4 gr.<br>Ferri " 1-2 gr.<br>Ferri " 1-4 gr.<br>*Iodide of Iron (Blancard's formula), 1 gr.<br>Iodoform, 1 gr.<br>Iodoform and Iron, 1 gr.<br>Ipecac & Opium (Dover's) Powd., U. S., 2-12 grs.<br>Ipecac & Opium (Dover's) Powd., U. S., 5 grs.<br>Iron by Hydrogen (Quevenna's), 1 and 2 grs.<br>Iron, Citrate and Quinine, 1 and 2 grs.<br>Iron, Proto-Carb. (Vallet's) Mass., 2 and 3 grs.<br>Iron, Proto-Carb. (Vallet's) Mass., 5 grs.<br>Iron, Proto-Chloride, 1 gr.<br>Iron, Quinine and Strychnine.<br>{ Ferrum Redactum, 1 gr. }<br>Quinine Sulphas, 1 gr.<br>Strychnine, 1-60 gr.<br>Laxative (Colic).<br>{ Res. Podophylli, 1-10 gr. }<br>Hydrarg. Chlor., Mite, 1 gr.<br>{ Ext. Col. Comp., pulv., 3 grs. }<br>Lime, Lacto-Phosphate, 5 grs.<br>*Mercury, Bis-Iodide, 1-25 and 1-15 gr.<br>*Mercury, Prot-Iodide, 1-5, 1-4 and 1-2 gr.<br>Morphine, Acetate, 1-8 and 1-4 gr.<br>*Morphine, Sulphate, 1-16, 1-10, 1-8, 1-6, 1-4 gr.<br>Morphine, Valerianate, 1-8 gr.<br>Neurialgia (Brown-Sequard).<br>{ Ext. Hyoscyami, 2-3 gr. }<br>" Conii, 2-3 gr.<br>" Ignatili Amarae, 1-2 gr.<br>" Opil, 1-2 gr.<br>" Acconitil, 1-2 gr.<br>" Cannab. Indicæ, 1-4 gr.<br>" Stramonii, 1-5 gr.<br>" Belladonnæ, 1-6 gr.<br>Neurialgia (Dr. Gross').<br>Quinine Sulphas, 2 grs.<br>Morphine Sulphas, 1-20 gr.<br>Strychnia, 1-30 gr.<br>Acid. Arsenosum, 1-20 gr.<br>Ext. Acconitil, 1-2 gr.<br>Neurialgia (Dr. Gross'), as above, without<br>Nux Vomica Extract, 1-2 gr.<br>Opium, U. S., 1 gr.<br>*Opium Extract, 1-4, 1-2 and 1 gr.<br>{ Opil, Pulv. 1 gr. Plumbi Acet., 1 gr. }<br>Opium and Camphor, 2 grs.<br>{ Opilum, 1 gr. Camphora, 2 grs. }<br>Papain, 5 grs.<br>Papain and Bismuth, 5 grs.<br>{ Papain, 2 grs. }<br>{ Bismuth Subnit., 3 grs. }<br>Papain, Bismuth and Strychnine, 5 grs.<br>{ Papain, 2-12 grs. }<br>{ Bismuth Subnit., 1-2 grs. }<br>{ Strychnia, 1-60 gr. }<br>Phosphate Iron, Quinine and Strychnine.<br>{ Ferri Phosphas., 2 grs. }<br>{ Quinine Phosphas., 1 gr. }<br>{ Strychnia Phosphas., 1-60 gr. }<br>Phosphorus, 1-100, 1-50, 1-30, 1-10 and 1-12 gr.<br>Phosphorus Compound, No. 1.<br>{ Phosphorus, 1-100 gr. }<br>{ Ext. Nucis Vomicae, 1-4 gr. }<br>Phosphorus Compound, No. 2.<br>{ Phosphorus, 1-60 gr. }<br>{ Ext. Nucis Vomicae, 1-4 gr. }<br>Phosphorus Compound and Iron.<br>{ Phosphorus, 1-100 gr. }<br>{ Ferri Phosphas., 1-2 gr. }<br>{ Ext. Nucis Vomicae, 1-8 gr. }<br>Podophyllin, 1-8, 1-4, 1-2 and 1 gr.<br>Podophyllin Compound.<br>{ Podophyllin, 1-2 gr. }<br>{ Ext. Hyoscyami, 1-8 gr. }<br>{ Ext. Nucis Vomicae, 1-16 gr. }<br>Podophyllin and Blue.<br>{ Podophyllin, 1-2 gr. }<br>{ Pil. Hydrarg., 2-12 grs. }<br>Podophyllin, Capsicum and Belladonna.<br>{ Podophyllin, 1-4 gr. }<br>{ Ext. Bellad. Alc., 1-8 gr. }<br>{ Iron, Capsici, 1-2 gr. }<br>Podophyllin, Ext. Coloc. and Belladonna.<br>{ Podophyllin, 1-2 gr. }<br>{ Ext. Coloc. Comp., 2 grs. }<br>{ Ext. Belladon., 1-4 gr. } | *Quinine, Carbolate, 1 gr.<br>*Quinine, Salicylate, 1 gr.<br>*Quinine, Sulphate and Bi-Sulphate, 1-4 and 1-2 gr.<br>Quinine, Sulphate and Bi-Sulphate, 1 gr.<br>Quinine, Sulphate and Bi-Sulphate, 1-12 gr.<br>Quinine, Sulphate and Bi-Sulphate, 2 grs.<br>Quinine, Sulphate and Bi-Sulphate, 3 grs.<br>Quinine, Sulphate and Bi-Sulphate, 4 grs.<br>Quinine, Sulphate and Bi-Sulphate, 5 grs.<br>*Quinine, Sulpho-Carbolate, 1, 2, 3 and 5 grs.<br>Quinine and Aloes,<br>{ Quinine Sulphas, 2-4 gr. }<br>{ Pulv. Aloes Soc., 1-4 gr. }<br>Quinine, Arsenic and Nux Vomica.<br>{ Quinine Sulphas, 1 gr. }<br>{ Acid. Arsenosum, 1-60 gr. }<br>{ Ext. Nucis Vomicae, 1-4 gr. }<br>Quinine and Iron.<br>{ Quinine Sulphas, 1 gr. }<br>{ Ferrum Redactum, 1 gr. }<br>Quinine and Carbonate Iron.<br>{ Quinine Sulphas, 1 gr. }<br>{ Ferri Subcarb., 2 grs. }<br>Quinine, Phosphorus and Nux Vomica.<br>{ Quinine Sulphas, 1 gr. }<br>{ Phosphorus, 1-60 gr. }<br>{ Ext. Nucis Vomicae, 1-4 gr. }<br>Quinine Compound.<br>{ Quinine Sulphas, 1 gr. }<br>{ Ferrum Redact., 1 gr. }<br>{ Acid. Arsenosum, 1-60 gr. }<br>Quinine Compound and Ext. Dandelion.<br>{ Quinine Bi-Sulph., 1-14 gr. }<br>{ Ferri Sulph., Exsic., 2 grs. }<br>{ Acid. Arsenosum, 1-94 gr. }<br>{ Extract Taraxaci, 1-14 gr. }<br>Quinine Compound and Strychnine.<br>{ Quinine Sulphas, 1 gr. }<br>{ Ferrum Redactum, 1 gr. }<br>{ Strychnia, 1-30 gr. }<br>{ Acid. Arsenosum, 1-90 gr. }<br>Quinine, Valerianate, 1-2 gr.<br>Rheumatism.<br>{ Ext. Coloc. Comp., 1-12 grs. }<br>{ Ext. Colch. Acet., 1 gr. }<br>{ Ext. Hyoscyami, 1-3 gr. }<br>{ Hydr. Chlor., Mite, 1-3 gr. }<br>Rhubarb, U. S.<br>Rhubarb Compound, U. S.<br>Santalin, 1 gr.<br>Santalin and Calomel.<br>{ Santalin, 1 gr. }<br>{ Calomel, 1 gr. }<br>{ Chocolate, 1 gr. }<br>Strychnine, 1-60, 1-40 and 1-30 gr.<br>*Strychnine Compound.<br>{ Strychnia, 1-100 gr. }<br>{ Phosphorus, 1-100 gr. }<br>{ Ext. Cannab. Indicæ, 1-16 gr. }<br>{ Ginseng, 1 gr. }<br>{ Ferri Carb., 1 gr. }<br>*Sulphur, Iodide, 1-25 and 1-10 gr.<br>*Sunell Extract, 1 gr.<br>Syphilitic (Coccy's) modified.<br>{ Hydr. Prot-Iodide, 1-2 gr. }<br>{ Lactacarium, 1-2 gr. }<br>{ Ext. Opil, 1-10 gr. }<br>{ Ext. Cinclæ, 1-12 grs. }<br>Tonic.<br>{ Quinine Sulph., 1 gr. }<br>{ Acid. Arsenosum, 1-50 gr. }<br>{ Ferrum Redactum, 2-3 gr. }<br>{ Strychnia, 1-60 gr. }<br>Triple.<br>{ Extract Aloes, 2 grs. }<br>{ Podophyllin, 1-2 gr. }<br>{ Pil. Hydrarg., 1-2 gr. }<br>Triplex (Dr. Francis).<br>{ Pulv. Aloes Soc., 1 gr. }<br>{ Ol. Terebinth., 1 gr. }<br>{ Pulv. Myrrhæ, Ol. Carui. }<br>Valerian Extract, 3 grs.<br>*Zinc, Phosphide, 1-8, 1-4 and 1-2 gr.<br>*Zinc, Phosphide and Ext. Nux Vomica.<br>{ Zinc Phosphidum, 1-10 gr. }<br>{ Ext. Nucis Vomicae, 1-4 gr. }<br>Zinc, Valerianate, 1 gr. |
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## RECENT ADDITIONS TO LIST.

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| Aconitina, 1-60 gr.<br>Aloin, 1 gr.<br>Ammonium, Valerianate, 1 gr.<br>Blue Pill Compound.<br>{ Pil. Hydrarg., 1 gr. Pulv. Opil, 1-2 gr. }<br>{ Pulv. Ipecac., 1-4 gr. }<br>Caffola, Citrate, 1 gr.<br>Calcium Sulphide, 1-10 gr.<br>Calomel and Opium, (2 grs.—1 gr.)<br>Cathartic Improved.<br>{ Ext. Colocynth. Comp. Pulv., 1 gr. }<br>{ Jalape pulv., Res. Lepid., aa, 1-2 gr. }<br>Ext. Hyosc., Ext. Taraxaci, aa, 1-4 gr.<br>{ Res. Podoph., 1-4 gr. Ol. Menthae Pip. }<br>Cerium, Oxalate, 1 gr.<br>Charcoal, Willow, 5 grs.<br>Cinchona Bark Alkaloids.<br>{ Quinine Sulph., 1-2 gr. }<br>{ Quinidine Sulph., 1-2 gr. }<br>{ Cinchonine Sulph., 1-2 gr. }<br>{ Cinchonidine Sulph., 1-2 gr. }<br>Coca Extract, 1 gr.<br>Codeia, 1-16 and 1-5 gr. | Croton Oil, 1-2 gr.<br>Gelsemium Extract, 1 gr.<br>Hydrastia (White Alkaloid), 1-2 and 1 gr.<br>Iron, Cit. and Strychnine, (1 gr.—1-50 gr.)<br>Iron, Dilyased (Scales), 2 grs.<br>Iron, Ferrousulphate, 1 gr.<br>Iron, Lactate, 1 gr.<br>Iron, Valerianate, 1 gr.<br>Jaborandi Extract, 3 grs.<br>Opium and Acet. Lead, No. 2, (1-2—1-12 gr.)<br>Ox Gal. Comp., 3 grs.<br>{ Fol. Bovin. dep., 2 grs. Pulv. Zingiber, 1 gr. }<br>Phosphorus Comp., No. 3, (1-50 gr.—1-8 gr.)<br>Phosphorus and Iron, (1-50 gr.—2 grs.)<br>Phosphorus, Iron and Quinine.<br>{ Phosphorus, 1-100 gr. }<br>{ Ferri Carb. (Vallet's), 1 gr. }<br>{ Quinine Sulph., 1 gr. }<br>Phosphorus, Iron, Quinine and Nux Vomica.<br>{ Phosphorus, 1-100 gr. }<br>{ Ferri Carb. (Vallet's), 1 gr. }<br>{ Quinine Sulph., 1 gr. }<br>{ Ext. Nucis Vomicae, 1-2 gr. } | Piperin Compound.<br>{ Piperin, 1-4 gr. }<br>{ Hydr. Chlor. Mite, 1-4 gr. }<br>Podophyllin and Lepidandrin, (1-2 gr.—1 gr.)<br>Poke Root Compound.<br>{ Ext. Phyllocæ, Alc., 2 grs. }<br>{ Ext. Stillingia, " 1 gr. }<br>{ Ext. Stramonii, " 1 gr. }<br>Potassium Bromide, 2 and 5 grs.<br>Quinidia Sulphate, 1 and 2 grs.<br>Quinine and Strychnine, (1 gr.—1-60 gr.)<br>Quinine, Iron and Nux Vomica.<br>{ Quinine Sulph., 1 gr. }<br>{ Ferri Carb. (Vallet's), 2 grs. }<br>{ Ext. Nucis Vom., 1-4 gr. }<br>Salicin, 2-3 and 5 grs.<br>Salicylic Acid with Morphine, (2-12 gr.—1-12 gr.)<br>Salicylic Acid with Morphine, (5 grs.—1-8 gr.)<br>Sandal Wood Ext. (McK. & R.), 1 and 2 grs.<br>Squill Compound, U. S.<br>Tartar Emetic, 1-100, 1-20 and 1-4 gr. |
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CAUTION!!—SPECIFY McKESSON &amp; ROBBINS'.

the require phia To his publ in 18 nica servi 1s opiu 2n are M. men the l dicat It in dc othe citer spiri of m of w dose depr sleep ment of st pove the The emp oper erat curi play semi part from sym plable one If acco tenc sucl and plie of a istr affe met I fess forr owi ma pati tior util dys

One of McKesson & Robbins' Pills, placed in the mouth, will be relieved of its coating in less than two minutes.

The coating, not being porous, will protect such preparations as Phosphorus and Iron Compounds better than Sugar.

## CHLORAL HYDRATE IN UTERINE CANCER.

This agent has recently been highly landed as an antiseptic in the puerperal state when used in the form of a vaginal wash. Dr. Dunster calls attention (*Michigan Med. News*) to its great value in uterine cancer. A solution 10 to 30 grains to the ounce, or used by saturating a cotton-wool plug, with a string attached, not only corrects the intolerable stench, but relieves the stinging pains so common in these cases.

## OXALATE OF CERIUM IN CHRONIC COUGH.

Mr. Thomas Clark (*Practitioner*, May, 1878) has for some time used the oxalate of cerium in cases of chronic cough with shortness of breathing, with very marked success.

One case under observation is a proof of its good effects as a sedative.

A lady has suffered for some years with cough and difficulty of breathing on the least exertion, "the outcome of an acute attack of pneumonia," the cough being most troublesome in the morning on getting up; so bad as to cause sickness. Mr. Clark prescribed 5 gr. half an hour before rising.

The physical signs observed in her case have been loud bronchial breathing, with great abdominal action, impaired resonance over lungs, with a slight dulness at the apex of left lung. The most marked physical changes since taking the ox. cerium, are less noise in breathing, less abdominal action, no cough in the morning, and increased strength.

Mr. Clark could relate other cases, but only mentions one other, it being under his care in the village hospital; a case of consolidation of the right lung. The rest given to the lung by the ox. cerium in gr. 5 doses is observable in the comfort in breathing and the cessation of cough for twenty-four hours after each dose.

The medicinal properties of ox. cerium Mr. Clark believes to be purely sedative, a great desideratum in the treatment of lung diseases, the difficulty being to find a drug that will not upset the digestive organs. In all cases wherein he has used the ox. cerium the only symptom observable from its use is a slight dryness of mouth.

## HOW TO TAKE THE TEMPERATURE.

Dr. Oertmann (*Archiv. f. Phys. und Centralbl. f. Nervenheilk*) proposes a new method of determining the body heat. It is to have the urine projected in a strong current against the mercurial bulb of the thermometer. He claims that a stream so directed for seven seconds will suffice.

## TREATMENT OF CROUP.

Dr. S. Odoini relates in the *Annali Universali* for March five cases of croup observed during the epidemic of Spezzia, in which he successfully employed copaiba and cubebs. His plan was to give to adults, every two hours, a dessertspoonful of a syrup composed of 3½ drachms of balsam of copaiba, about 5 drachms of powdered gum, 1½ ounces of water, and 14 drops of essence of mint; and also, every two hours, a tablespoonful of a mixture consisting of 186 grains of recently powdered cubebs and 8 ounces of syrup. For children the dose was reduced. The malady disappeared in a period of two or three days, rarely extended to seven.

Four or five cases were children under four years of age, some affected with simple croup, others with croup complicated with diphtheria. The condition of the patients when first put under treatment was very grave; there was high fever, the submaxillary glands were engorged, the voice and crying were weak, cough hoarse, and there was marked dyspnoea. The beneficial effects of the medicine above described occurred without the use of emetics, mercurials, or any other treatment.

## EXOPHTHALMIC GOITRE CURED BY GALVANISATION OF THE SYMPATHETIC TRUNK OF THE NECK.

Aneona (*Giornale Veneto delle Scienze Mediche*) reports a case of this kind. Stöbrer's machine (10 elements) was used during from three to five minutes daily. The cure was effected in five months.

## FORMULÆ.

*In Chronic Adenitis.*

℞ Emplast. hydrarg ..... 3 ss;  
Pulv. opii,  
Pulv. camphoræ, aa gr. xiiij.—M.

To be spread as a plaster and applied to the tumefied ganglions.—*Dict. de Méd. et de Thérapeutique.*

*Iodoform in Indolent Venereal Ulcers.*

℞ Iodoform..... 3 vj;  
Glycerin..... f3 iij;  
Alcoholis..... f3 i.—M.

To be applied on lint, and changed not oftener than twice daily.—(Klink: *Vierteljahrsschr. f. Derm. u. Syph.*, 1877, p. 397.)

## THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Science.

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D. L.R.C.P., LOND

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All communications and Exchanges must be addressed to the Editor, Drawer 356, Post Office, Montreal.

MONTREAL, JUNE, 1878.

## AN EXPLANATION.

Very many of our readers did not receive our last number till far on in June. This was



owing to the fact that by some most unaccountable negligence one bagfull was detained in the Montreal Post-office till the 18th of June, for non-payment of postage. On that day we were notified of the fact, and at once set the matter right. This we will take good care does not occur again.

#### TO OUR SUBSCRIBERS.

We beg to direct attention to the following notice regarding the terms of the *Record*, which we published in the first number (October, 1877) of the present volume :

*"To all who pay for the Record previous to the end of the volume, the price will remain as now, two dollars a year ; after that it will be charged at the rate of three dollars a year."*

We intend strictly to carry out these terms. As we have more than once stated, the subscription of two dollars makes the *Record* the cheapest Medical Journal in Canada, and we might almost say in America. We placed it at this very low rate, believing that it would ensure prompt payment. We find that we have been mistaken, and that we have leaned on a broken reed. We have, therefore, been compelled to offer some inducement, and we now plainly give notice that the subscription price of the *Record*, is three dollars a year, unless paid before the end of the volume, when the two dollars a year will be accepted. In our last issue we enclosed accounts to every one of our country subscribers, so that each is aware exactly of the condition of his account. *We hope to have a prompt response from them during the ensuing month.*

Commencing with the present number, our subscribers will notice that we have adopted printed addresses on the wrappers of the *Record*. This method, besides facilitating our dispatching, enables every one each month to see how his account stands. The date following the name, is the date to which the subscription is paid. Subscribers will have the kindness to notice that the change is made in the month following his remittance. If the alteration is not made he should notify us by postal card.

#### VICTORIA MEDICAL SCHOOL AND LAVAL UNIVERSITY.

It is currently reported that harmony has not prevailed among those who have been named Professors in the new medical branch

of Laval in Montreal. It will be remembered that, in the early negotiations with reference to the establishment of the new Medical School in Montreal, certain members of Victoria Medical School were, it was said, intended to be dropped. The possibility of their still continuing to exist, re-inforced, under their charter, together with much pressure, induced Laval to consent to take the old Faculty of Victoria in a body, and make them Professors in Laval. This was done, and many thought that all would be well. Not so, however, for hardly had the arrangement of details commenced, when difficulties arose, and we know that for a time the sky was far from clear. It is said Laval has, through its Rector, called upon three, if not more, of her recently appointed Professors, to resign. Whether they have, or will do so, time will tell. If they do, it is not unlikely they will re-form the old school and *L'Ecole de Medicine et Chirurgie de Montreal*, may for years be among our medical schools.

#### PERSONAL.

Dr. Molson, Assistant Demonstrator of Anatomy, McGill College, has returned from Europe.

Dr. Craik, Professor of Chemistry in McGill University, sailed for Europe by the *Sarmatian* on the 22nd of June. He proposes being absent some two or three months.

Dr. Major, of Montreal, has returned to Montreal, after nearly a year's sojourn in Europe.

Dr. Brodie, (M.D., McGill College, 1877) has returned after an extended stay in Europe, and has commenced practice in Montreal.

Dr. Sutherland, (M.D., McGill College, 1876) is practising in Valleyfield, Que.

Dr. Neilson, Surgeon B Battery, Quebec, has rejoined his corps, after a course at Netley, England.

The following medical officers served with their corps during the recent riots at Quebec: Surgeon F. W. Campbell, and Assistant-Surgeon McConnell 1st Batt. (Prince of Wales Rifles); Surgeon Sewell, 3rd Batt. (Victoria Rifles); Assistant Surgeon Burland, 5th Batt. (Royal Fusileers); Surgeon Parke, 8th Batt. (Royal Rifles); Surgeon Neilson, B Battery; Surgeon Stancliffe, Canadian Hussars.

#### BIRTH.

At Simcoe, Ont., on the 12th of May, the wife of James Hayes, M.D., of a son.

## Pharmaceutical Department.

A. H. KOLLMYER, M.A., M.D., Editor.

### PHARMACEUTICAL NOTES.

By H. R. GRAY, MONTREAL.

Physicians keeping drug stores in this Province, although at present exempted from payment of the annual license fee paid by all Licentiates of Pharmacy, are, nevertheless, so far as their clerks and apprentices, and the sale of poisons are concerned, obliged to conform in every respect to the Pharmacy Act. Medical students cannot be employed in drug stores, unless they are registered according to law; neither may apprentices be taken until they have passed the preliminary examination, and have had their names placed on the Register. It would therefore seem advisable for medico-pharmacists to make themselves acquainted with the provisions of the Pharmacy Act, as it has happened that apprentices have been employed without ever having been informed of the necessity of being registered, thus rendering both apprentice and employer amenable to the law.

The writer of these notes has been informed that a druggist of this city recently sent to a physician an ounce of Cyanide of Potassium and a package of Compound Jalap Powder, without labelling either the one or the other. Such carelessness or recklessness is inexcusable. Accidents will and do happen to all, both physicians and pharmacists, neither of whom are more infallible than other people; nevertheless, every possible precaution that human ingenuity can suggest should be taken to prevent them.

It has often been suggested that the easily cultivated and prolific pumpkin might be utilized to a much greater extent than at present. Prof. Storer states that the rind of this vegetable is nearly three and a half times as rich in Albuminoids as the flesh; the seeds contain a large proportion of nitrogen and a high percentage of oil. The seeds are eaten by the Chinese and also by the Egyptians.

It is just possible that the despised Cockroach (*Blatta Orientalis*) will be bought and sold by pharmacists before long, and perhaps be canonized in the next pharmacopœia. In Russia it is becoming a favorite remedy for dropsy. Dr. Bojomolow says, in nine cases of dropsy resulting from Bright's disease, heart disease, &c., there was an increase in the secretion of urine and perspiration, rapid disappearance of œdema, and that albumen and renal derivatives disappeared from the urine. The active principle which has been extracted from them has been called by Doctor Bojomolow, "Antihydropsin." Five to ten grains of pulv. *Blatta Orientalis* in the 24 hours is the dose.

The following extracts from an article on "the Profession of Pharmacy," by G. M. Baker, in the "Philadelphia Druggist and Chemist," is very applicable to Montreal: "Another cause of demoralization the practice on the part of wholesale dealers retailing at wholesale prices. \* \* \* There is

no need of demonstration to show how injurious this must be to the interest of the retail pharmacist, or how strong a pressure it is toward demoralization." In reference to educational standards he says:—"Fairly and candidly weighed, the profession, as a whole, is already, in respect to attainments and qualifications, in advance of its material prosperity."

An exchange states that the mosquito gum of Western Texas and Mexico is almost identical with gum arabic. During the past year it has become an article of export, some 12,000 pounds having been gathered in Bexar county, and as much more between that and the coast.

Castoreum is becoming scarce and dear. It is quoted at \$4.50 per lb. in New York. The Siberian at 10 cts. per grain. Why there should be any demand for this latter is a mystery.

### NOTES ON HYDROBROMIC ACID.

By H. R. GRAY, MONTREAL.

Hydrobromic Acid, or Bromide of Hydrogen, is a colorless gas, with an acid reaction, very soluble in cold water, and giving off fumes in a damp atmosphere.

Its formula is H. Br. molecular weight 81., or 80 parts Bromine and one part Hydrogen. It bears the closest resemblance to Hydriodic Acid, and may be prepared by means precisely similar, substituting Bromine for Iodine. It is made by decomposing bromide of phosphorus by water.

The solution of this gas in water forms the liquid known pharmaceutically as Hydrobromic Acid, but which might more correctly be termed Diluted Hydrobromic Acid, or solution of Hydrobromic Acid.

It may be made of any strength until such time as it becomes an official article of the pharmacopœia.

Dr. Squibb, the celebrated manufacturing pharmacist of Brooklyn, in a paper read before the Medical Society of New York State, proposes to take the potassium salt, as being the most commonly used of all the Bromides, as a standard for adjusting the strength of this acid.

As the potassium salt contains 68 per cent. of Bromine, a solution of Hydrobromic Acid containing also 68 per cent. of Bromine, would necessarily have the same Bromine value, but as an Acid of this strength would be difficult to make and dispense, therefore, it would be more practicable to have it of only half the strength of the salt, or 34 per cent., thus representing the Bromine of the Bromide of Potassium in the proportion of 2 to 1.

The equivalent of 20 grains of Bromide of Potassium would be 40 grains by weight of the Acid thus prepared. Dr. Squibb proposes the following formula:—

Pot. Bromidum—6 parts.....  
Acid Sulph. sp. gr. 1.838—7 parts.....  
Water—9 parts.....

The process given by Squibb for carrying out this formula is very tedious and complicated, and the only object in suggesting it, when other and simpler forms

are extant, seems to be to place Hydrobromic Acid among the list of chemicals only obtainable from manufacturing chemists.

Solution of Hydrobromic Acid thus prepared is a limpid, colorless odorless liquid having a *very* strong acid taste and the specific gravity of 1.274. Fifty measured minims would be the Bromine equivalent of 30 grains of Bromide of potassium. Fothergill and Wade both state, however, that in practice the Acid is effective in much smaller doses than its equivalence to the Bromides would indicate, which corroborates the opinion previously formed by Dr. Squibb. Dr. Squibb, speaking from the limited experience of the physicians in contact with him, says it would appear that the dose needed for a prompt sedative effect is from 15 to 25 measured minims and even larger. This dose, it must be borne in mind, only refers to the acid when prepared by Dr. Squibb's process, which being so concentrated, has the very great disadvantage of being extremely acid; in fact, so much so, that 15 or 20 minims require at least 2 ounces of water with syrup to make it agreeable.

Dr. Wade, of Holly, Michigan, who may justly claim to have introduced this chemical to the practical notice of pharmacists and physicians, differs from Dr. Squibb as to the best formula, stating with justice there is no necessity for complicated formulæ requiring special apparatus and time, when simple ones will do quite as well, and reiterates in a recent letter to a New York Pharmacy Journal the assertion, that many physicians not only use this acid, to the exclusion of the Bromine Salts, but also for many purposes where the latter would not produce similar results.

The following is the formula which was originally proposed by Dr. Wade, and to which he alludes in his letter of March last:—

R Potassii Bromidum, 11 oz. avoirdupois.

Acid Tart. Chrystals, 14 oz. “

Water, 40 fluid oz. ....

Dissolve the Bromide and then the Acid in the water; keep in a cold place until precipitation ceases and decant. This contains 10 grains of Bromine in each fluid dram, and as an unobjectionable impurity about 1/8th of a grain of Potass. Bitart. in each dose.

The Acid, thus prepared, is the kind in general use in this city, and it has been found to answer the expectations of prescribers. The average dose for an adult, according to Dr. Wade, is half a fluid drachm well diluted. A mixture containing one ounce of Hydrobromic Acid (Dr. Wade's formula) with two ounces of syrup of orange and sufficient rose water to fill an eight-ounce vial, makes a very pleasant acid mixture, and why should not prescribers always make their medicines pleasant to take? Assafoetida, skilfully coated with sugar, is at once converted into a bonbon, while numerous formulæ attest the ease with which Valerianate of Ammonia may be converted into a very pleasant elixir.

Dr. Wade, in his letter, states as a reason for introducing Hydrobromic Acid to the notice of the profession as a substitute for the Bromine Salts, that the effect always depends upon the amount of Hy-

drobromic Acid produced in the stomach by the decomposition of the Salt, and it is probable that generally a part of the salt becomes absorbed before being broken up, and the effect of the Bromine of such part lost, owing to the variable amount of free acid present in the stomach at the time of the administration of the salt. He further asserts it is found clinically, as well as in theory, that a smaller amount of Bromine, in the form of Hydrobromic Acid, will produce the specific effects of this halogen upon the system, than when administered chemically united to a base.

Dr. Squibb, in his paper above alluded to, differs on several important points from Dr. Wade, but as Dr. Wade speaks from much practical experience in the use of this Acid, his opinions must necessarily carry the greater weight.

PHARMACOGRAPHIA.—We have the pleasure of announcing that arrangements are being completed, whereby Prof. Fluckiger will publish through Wm. Wood & Co. an edition of the Pharmacographia specially adapted to the materia medica of the United States, Canada, and the West Indies.

SALICYLIC ACID FOR KEEPING LEECHES.—A correspondent of the *Pharmaceutische Zeitung* writes thus: “I have with much interest prepared all the compounds of salicylic acid, and made every imaginable experiment with it. As I was one day examining my leeches the idea occurred to me to ascertain how these animals were affected by salicylic acid. Accordingly, I placed two apart, and added water and the acid; too much of the latter being employed, the leeches expelled blood and died. Another was placed in water containing a very minute proportion of the acid; the animal remained quite lively, excreted mucus in the usual natural manner, and at the end of a month the water was free from any disagreeable smell and remained tasteless. After a month I placed two leeches in about 100 c.c. of water to which had been added four drops of an aqueous solution of .33 per cent. salicylic acid. Having kept the first leech three months, and the latter two two months, in unchanged water, they remain quite healthy, and the water is fresh and clear. Eight days ago I found the water in a litre vessel, in which I had placed 100 leeches, turbid and slimy, and of a foul smell, with three dead leeches at the bottom. I removed the dead animals, added to the water 30 drops of the above solution of salicylic acid, and set the vessel aside. Next morning the foul smell had quite gone, and the animals were very lively. I poured forth the water, well-washed the leeches, rinsed the vessel, and supplied it with fresh water containing 20 drops of the solution. Since then the animals have been healthy, no death has occurred, and the water remains fresh and clean. This observation must certainly be of the highest interest to pharmacists, especially as summer is now at hand, when it is very difficult to keep these delicate creatures alive and in good condition. I would recommend, therefore, to all who are obliged to keep leeches the use of salicylic acid, and am confident they will be pleased with the result.”

**SOME PROPERTIES OF SALICYLIC ACID.**—BY M. HENRI LAJOUX.—SALICYLIC acid has already obtained an important place in therapeutics and the arts, though it is not long since its manufacture was rendered practicable by Kolbe. The author's experiments show that the elimination of salicylic acid by the kidneys is more rapid than is generally supposed: its presence in the urine may be detected half an hour after ingestion. This differs from the conclusion of German writers who allow two hours from the time of absorption for the appearance of the acid in the excretæ. Twenty hours are required for its total elimination. The antiseptic properties of the alkaline salicylates are greatly inferior to those of salicylic acid. Kolbe has shown that salicylic acid forms alkaline salicylates when added to fresh venous blood. Very pronounced effects, therefore, should not be expected from the administration of the acid if means are not taken to prevent neutralization by the alkalies present in the blood, and, as citric acid replaces salicylic in its combinations, M. Lajoux advises the employment of a syrup containing citric acid and 0.25 per cent. of salicylic acid. To preserve syrups liable to ferment, such as those of cherries, mulberries, gentian, capillaire, and ipecacuanha, he finds that a minimum of one tenth per cent. of the sugar contained in the syrup is necessary. His experiments were conducted in a laboratory having a temperature of about 17° C., in test tubes loosely covered with paper. At the end of two months they were still perfectly fresh, although other samples not treated with the acid were completely decomposed.

J. Muller has remarked that  $\frac{1}{500}$  of salicylic acid does not prevent the formation of mould in urine, which, however, still remains acid and free from bacteria. According to the same experiments, half this proportion of carbolic acid preserves urine from every kind of change. It is well known that salicylic acid paralyses much more energetically than carbolic acid the action of yeast and ptyaline, the transformation of glycogen into sugar, and the gastric fermentation; it prevents also both the lactic and sinapic fermentation. In other cases it is carbolic acid which produces the more intense effect. It seems, indeed, as if the action of carbolic acid were directed specially against the development of mould, and that of salicylic acid against fermentation. M. Lajoux is of opinion that it would be highly interesting to study the effects of these two bodies upon the grainy matter studied by M. Baudrimont under the name of *pseudo-organised body*, which precedes the formation of algae (*oscillaria thermalis*) in Vichy water under the influence of light and atmospheric oxygen. Those who, with Berthelot, do not see in fermentation a phenomenon correlative to life and the development of an organised being, and those who, with Fremy, attribute to semi-organised bodies the production of the organisms which characterise the true fermentations of Pasteur, will find in the difference of action of salicylic acid on mould and on ferments, one argument the more in favour of their doctrines.

M. Lajoux has observed, as also have M. M. Millon and Leweran, that salicine, in passing through the

animal organism, is transformed into salicylic acid. If salicylic acid exerts a febrifuge action, this observation should explain the similar action of salicine.

**FORMIC ACID AS AN ANTISEPTIC.**—The number of antiseptics is now so considerable that it seems almost hazardous to wish to increase it. Each new antiseptic that appears is extolled as the only saviour, and page after page of testimonials proves its excellence and infallibility. As the people may easily be distracted if every "discoverer" pours forth the abundance of his paternal joy over his offspring, which is frequently far from ripe, it is easy to see that the series of experiments made without prejudice by disinterested persons is of great value. In the experiments, made and published recently by Bidwell and others, they overlook, says G. Feyerabendt, one substance, which for certain purposes cannot be replaced by any other, namely, formic acid. He does not lay claim to priority, for Dammer, in his excellent dictionary, mentions its antiseptic properties, nor is he a manufacturer of the article; so he does not speak in his own interest, but in that of the subject.

In acid solutions formic acid far surpasses carbolic acid, and is especially adapted to the preservation of fruit syrups. Experiments made by Feyerabendt in his own household for two years have, without exception, been crowned with success. He has two jars of pickles made with vinegar and sugar from the year 1875, that have only been covered with a loose glass cover, yet they have preserved their freshness, and show no trace of mould or decay. The taste of formic acid is pure, acid, and pleasant, the price low, and its use very simple. He has employed from  $\frac{1}{4}$  to  $\frac{1}{2}$  per cent. of it in vinegar, fruit-juice, glue, ink, etc., and is convinced that even smaller quantities will answer the purpose.

He especially seeks to excite the attention of housekeepers, and feels confident that they will be satisfied with the results, and introduce formic acid as a good and true friend in pantry and kitchen.

Ordinary formic acid is made by heating together to 110° C. equal parts of dry oxalic acid and glycerine until no carbonic acid is evolved. The pure concentrated acid is obtained by decomposing the formate of lead by sulphuretted hydrogen, and might contain lead. (*Scientific American.*)

**SALICYLIC ACID FOR PRESERVING LIME JUICE.**—The following, which will be both new and interesting to many, is communicated to the *Pharmaceutische Zeitung* by Niemer, a pharmacist of Münster. It is too well known that the preservation of recently expressed lime juice is a great difficulty to pharmacists. According to two experiments, 0.25 of a gramme of salicylic acid will prevent the development of fungi in three pounds of fresh lime juice, the latter being in a half-filled flask. A trial made under similar conditions, but without the salicylic acid, resulted in the formation of mould in ten days. It was also found that cream which refused to churn could readily be made to do so by the addition of a very small quantity of this acid.

**TEST FOR TARTARIC IN CITRIC ACID.**—A ready method of detecting the admixture of tartaric with citric acid is described by M. Cailletet in the *Répertoire de Pharmacie*. One gramme (say 15 grains) of the acid to be tested is introduced into a test tube and mixed by a glass rod with ten cubic centimetres (say  $2\frac{1}{2}$  fl. drachms) of a saturated solution of bichromate of potash. If after, standing for about ten minutes, the mixture shows the orange color of the bichromate, the acid may be considered pure. With one per cent. of tartaric acid the mixture assumes a coffee-color; with five per cent., a distinct blackish-brown.

**FRECKLES, AND HOW TO TREAT THEM.**—Many remedial preparations of a more complicated character have been recommended, of which New Remedies gives the following:

|                             |          |
|-----------------------------|----------|
| R̄ Zinci sulpho-carbol..... | 2 parts; |
| Glycerine.....              | 25 "     |
| Aq. rosæ.....               | 25 "     |
| Spiritus vini rect.....     | 5 "      |

Dissolve and mix. The freckled skin is to be anointed with this twice daily, the ointment being allowed to stay on from one-half to one hour, and then washed off with cold water. Anæmic persons should also take a mild ferruginous tonic. In the sunlight a dark veil should be worn.

A French journal recommends a collodion containing ten per cent. of its weight of sulpho-carbolate of zinc, as giving excellent results. The solutions of corrosive sublimate and other mercurial salts, often used for the purpose, are more or less dangerous, and should be avoided. The following lotion, which contains only a minute proportion of mercury, is harmless and well recommended:

|                           |           |
|---------------------------|-----------|
| R̄ Hydrarg. perchlor..... | gr. v;    |
| Acid hydrochlor.....      | gtt. xxx; |
| Sacch. alb.....           | ℥ j;      |
| Spt. vin, rect.....       | ℥ ij;     |
| Aquæ rosæ.....            | ℥ vij.    |

The following formula is also highly recommended:

|                                 |           |
|---------------------------------|-----------|
| R̄ Sulpho-carbolate of zinc.... | 1 part;   |
| Collodion.....                  | 45 parts; |
| Oil of lemon.....               | 1 part;   |
| Absolute alcohol.....           | 5 parts.  |

The sulpho-carbolate of zinc should be reduced to an extremely fine powder, and should then be thoroughly incorporated with the fluid mixture.

Here is another, in which white mustard-seed and lemon juice are the chief ingredients:

|                           |       |
|---------------------------|-------|
| R̄ Pulv. sinapis alb..... | ℥ ij; |
| Olei amygdal.....         | ℥ ss. |

Succi limonum, enough to make a thick paste.  
Mix. To be applied as an ointment.

It is also said that powdered nitre moistened with water, and applied night and morning, will soon remove all traces of freckles. An old-fashioned school prescription is sour milk or buttermilk, emesduilo hynwsabnuhanswer the purpose.

**DISPENSING MEMORANDA.**—The duties of a pharmacist are two-fold. In the first place he has to satisfy himself that every preparation is properly made, and also properly preserved for use. In the second place, that these preparations be accurately dispensed in accordance with the prescriptions of the several branches of the medical profession. If the former be neglected no amount of accuracy in dispensing will secure uniform results, and if the latter be carelessly attended to, or conducted without a fair amount of intelligence, all the advantages of scientific training which may have been reasonably expected to result in success will be neutralized.

The February number of the *American Journal of Pharmacy* contains a report of an incident that is worth mentioning in connection with the subject of explosive mixtures. A druggist having dispensed a prescription for nitro-hydrochloric acid and tincture of cardamoms, handed the mixture to the messenger, who was in the act of putting it into his pocket, when he was startled by the bursting of the bottle, and the scattering of the contents over his clothes. Like Bruce's spider, the druggist tried again, and handed his second product to the messenger with the caution that he was not to shake it. This injunction, intensified by the bearer's own experience, postponed the dénouement until the bottle reached the patient's hands, when the cork was violently expelled, and acid and fumes spurted up into her face, nearly destroying her eyesight, and causing several days suffering. It is conjectured that the acids were mixed and put into the bottle without waiting for the consequent reaction to take place.

**POISONING BY POTASSIUM CHLORATE.** The April number of the *Druggists Circular* furnishes us with the particulars of a second case of poisoning by this salt, which has hitherto been considered, both by the medical and pharmaceutical professions generally, as rather an innocuous remedy, comparatively speaking. The first recorded case is that of Dr. Fountain, of Davenport, Iowa, who took one ounce at a dose, and fell a victim to his temerity. The second was that of a little daughter of Dr. Kauffman, of Minersville, Schuyskill county, aged two and half years, who chewed and swallowed about half an ounce of the crystalline salt, and died seven hours afterwards, with symptoms of gastric-enteritis, vomiting and purging; diluents and cathartics had been freely used, and all other appropriate measures adopted, but without avail. The child gave no indications of pain, but was apparently in a stupor all the time; there was a marked tendency to slumber.

**REPERTOIRE DE PHARMACIE.**—J. CLOUET: "Arsenical Glucose," [In view of the fact that glucose is used at present in very large quantities by brewers, confectioners, and others, and that its consumption is likely to assume immense proportions, the author warns from the use of glucose containing arsenic, the presence of which is owing to impure sulphuric acid used in its preparation. He has met with samples of glucose containing from 0.015 to 0.109 gm. of arsenic in 100 gms. of glucose.]



## Original Communications.

### MONTREAL GENERAL HOSPITAL.

*Popliteal Aneurism.* (Under the care of Dr. WILKINS.)

Michael McCormac, aged 28, laborer, was admitted into Hospital under Dr. Wilkins' care, on the 9th of August, 1877, suffering from aneurism in the right popliteal space. Patient is well-built, about 5 feet 6 inches in height, and has the appearance of enjoying very good health. He says he was never ill excepting a slight attack of intermittent fever he had about three years ago. He has, however, a scar in his right groin. About eleven years ago he had an ulcer on the glands penis, involving the frenum, which it subsequently perforated, and which perforation is still patent. Before the ulcer healed he had a suppurating bubo in the right inguinal region which he had had opened. He says he never had an eruption of any sort on his skin, nor had he ever suffered from sore throat. There are no enlarged glands nor other evidences pointing to the ulcer and accompanying bubo being other than chaneroid.

About six months ago he first complained of an uneasy sensation in his right leg, and of fatigue after slight exertions, still, he continued to work for about two months longer, when he was obliged to desist. At about this time (that is four months ago,) his foot and leg commenced to swell and become painful. For the first time, about two months previous to entering Hospital, he first noticed "throbbing" under the knee, although it had been painful for about a month previously.

Upon admission into Hospital a pulsating tumor about the size of a hen's egg was felt in the right popliteal space. At each pulsation, fingers placed one on each side of the tumor diverged considerably and with a strong impulse. A thrill was distinctly felt, but no bruit could be heard. This knee measured one inch more in circumference than the other.

As the case was considered a favorable one to try the method of cure by Esmarch's bandage, first recommended by Dr. Walter Reid of the Royal Naval Hospital, Plymouth, and subsequently by Mr. Wagstaffe of St. Thomas' Hospital, it was decided to make the attempt.

On the fifteenth of August an ordinary roller

bandage was tightly applied over foot and leg, as far as the lower border of the popliteal space, then loosely over this space, commencing to roll again tightly just above the tumor, carrying the bandage as high up as the junction of the upper and middle thirds of the thigh; a strong elastic ligature was now tightly applied, entirely cutting off the supply of blood to the parts beyond. The bandage and ligature were both left on for exactly one hour; of course during that time there was no pulsation whatever in the tumor. A hypodermic injection of one-third of a grain of morphia was administered. About a quarter of an hour after the application of the bandage and elastic ligature, he commenced to suffer pain, which in a very few minutes became almost intolerable, so much so that a second injection of the same quantity of morphia was administered, after which he still continued to suffer intensely. At the expiration of the hour both bandage and ligature were removed, when the tumor was still found to pulsate, although it was slightly diminished in size.

Fearing that the want of success of this attempt to cure might have been due to the application of too great a pressure directly over the tumor, squeezing some, if not all, of the blood out of it, and consequently not allowing a coagulum to form to the full size of the aneurismal portion of the vessel, instead of imprisoning it there and thus forcing coagulation, it was decided to make another attempt.

August 17th. Instead of using cotton roller, as on the previous occasion, elastic bandage was firmly applied from the toes up to the lower border of the popliteal space. Over this space, a thin layer of cotton wool was placed, as recommended by Mr. Wagstaffe, and the bandage lightly applied, commencing again to apply it tightly immediately above the tumor, up to within about four inches of Poupart's ligament. The elastic ligature was tightly applied, and both bandage and ligature kept on for seventy minutes. As on the previous occasion he very soon commenced to suffer intensely, especially from the elastic ligature. A hypodermic injection of half a grain of morphia was given as soon as the ligature was applied, but the pain became so exasperating that for about the last twenty minutes he was kept under the influence of chloroform. On removing the bandage and ligature, the tumour was still found to pulsate.

Three days afterwards, August 20th, it was determined to make a third attempt; this time, however, the elastic ligature was omitted, the elastic bandage only being used, and two tourniquets were alternately applied over the femoral in the upper third of the thigh. At the end of about an hour the bandage was removed, the tourniquets were momentarily slackened, when pulsation was still felt in the tumor, although it was much smaller in size than previously. The pressure of the tourniquets was kept up for twenty hours, at the end of which time they were entirely removed, when all pulsation in the tumor had entirely disappeared, although a small vessel was felt pulsating at one side of the tumor. The tumor was much reduced in size, and quite firm and hard. Patient was kept in bed for a week longer, when he was allowed to rise, perfectly cured; he was able to walk and stand with ease, and quite free from pain. Discharged September 5th.

**NOTE.**—Patient was again admitted October 4th, under care of Dr. Roddick, with symptoms of abdominal aneurism, but, as he left the Hospital ten days subsequently, further progress of the case was lost sight of.

In this case a fair trial was given the method of rapid cure by Esmarch's bandage as recommended by Reid and Wagstaffe. It failed in its object, although there is no doubt it helped, as after each application the tumor was smaller. The first attempt was not properly carried out, as the bandage was not applied loosely over the tumor, as it should have been. A great part, if not all, of the blood was squeezed out of the tumor, as well as the vessels below it, consequently there was no blood left in it to coagulate and thus occlude the aneurism. This error was avoided in the two latter attempts, but with no more success.

*Stricture of Urethra. Cure under care of Dr. WILKINS. (Reported by Mr. Young).*

Frederick D., 34 years of age, was admitted into Hospital on the twenty-third of July, 1877, suffering from orchitis, induced by gonorrhœa, there was also a slight discharge from the penis; he complained also of a difficulty in micturating—having a constant desire without being able to do much, and then with great pain. The

testicle was very much swollen and tender. The solid nitrate of silver was applied to scrotum. The swelling of the testicle gradually subsided. The urine, however, continued to dribble away in a small stream, and was passed with great pain. August 20th, the orchitis returned with greater tenderness than before. His temperature rose to 101°, falling the same evening to 97.45°, remaining normal for a day, then rising. This continued from the 20th August to the 11th September, the highest 104°, the lowest 97°. The orchitis having again yielded to the application of Ag No 3, and the fever to large doses of sulphate of quinine, the state of the urethra could now be investigated more fully, and it was found that a stricture existed, about half an inch in extent, near the meatus urinarius, and another, of greater extent, near the membranous portion of the urethra. Dr. Wilkins, finding no signs of the inflammation returning in the testicle, determined to dilate the urethra, and thus obliterate the stricture. A whalebone director, 1-16 of an inch in diameter, was, with difficulty, introduced into the bladder. Otis' modification of Thomson's divulsor was passed over this, and the stricture at once dilated to size of No. 12 catheter, and withdrawn, when a No. 10 silver catheter was easily introduced and the patient relieved of two pints of urine. 21st September, patient has voided urine, good, free stream, complaining of scalding pain when doing so; gleet discharge still continues, but less in quantity. 25th, Dr. Wilkins again passed a No. 10, met with no unusual difficulty further than the tenderness complained of by patient. Patient continued to improve from this time, and in ten days all tenderness had disappeared and the patient considered cured, as he was able to pass his urine in a large stream. About six weeks after operation, patient was seen by Dr. Wilkins and there were no symptoms of return of stricture.

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### Progress of Medical Science.

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It is asserted that a man's finger-nails grow their complete length in four months and a half. A man living seventy years renews his nails one hundred and eighty times. Allowing each nail to be half an inch long, he has grown seven feet nine inches of finger-nail on each finger, and on fingers and thumbs an aggregate of seventy-seven feet and six inches.

## THE PREVENTION OF PUERPERAL FEVER.

In the last number of the *Monthly Abstracts*, page 231, we directed the attention of our readers to the valuable work which our German *confères* are doing in attempting to introduce an antiseptic element into the conduct not only of severe, but of normal midwifery cases. The subject is of such importance that we think no apology is needed for again adverting to it, and adducing yet further evidence of its utility. The information of which we are now making use is derived from an excellent article by Professor Zweifel of Erlangen, in No. 1 of the *Berliner Klin. Wochenschrift*, 1878.

It appears that the idea of "Listering" in obstetrics (the German have coined the verb "Listern" to express the use of Professor Lister's antiseptic method, just as from Galvani's name we have coined the verb "galvanize") was first started by Bischoff, of Basle, in 1870 (*Korrespondenzblatt für Schweizer-Aerzte*, 1875, No. 22, 23). His plan consisted in giving a bath as soon as the first pains of labour were observed, washing out the vagina with a 2 per cent. solution of carbolic acid every two hours, and anointing the fingers of the medical attendant with 10 per cent. carbolic oil at each examination, the hands being previously disinfected by washing them with 3 per cent. aqueous carbolic acid. In case the hand had to be passed into the uterus, or if the foetus was dead and decomposed, the uterus was washed out with a 2 to 3 per cent. solution of carbolic acid; and in every case frequent injections of the latter were made into the vagina and uterus for thirteen days after the birth of the child. Immediately after the labour, any wound was touched with a 10 per cent. carbolic solution, no ligature, if such were necessary, being applied until this had been done. Lastly, a pad of wadding soaked in carbolic oil (one to ten) was placed in the entrance of the vagina and constantly renewed. Under this system the number of cases in which morbid symptoms were present, consisting in a febrile temperature of more than two days' duration, and reaching 38.5° Cent. (101.3° Fahr.) at least on one day, tenderness of the abdomen on pressure, and fetid discharge, etc., was, in 1870, 14 per cent.; 1871, 22.3 per cent.; 1872, 24.5 per cent.; 1873, 16.8 per cent.; 1874, 10.7 per cent.; 1875, 8.9 per cent.; or taking the average of the whole, 16.2 per cent. for the six years.

In 1875, A. Fehling published (*Archiv für Gynäkologie*, Band xiii., s. 298) the results of experiments made for about a year in Professor Credé's clinic at Leipsic, and which consisted in applying a mixture of salicylic acid and starch (one to five) to any wounds of the external genitals and in syringing the vagina four to eight times daily, in case of fever and fetid discharge, with solutions of salicylic acid ( $\frac{1}{2}$  to  $\frac{1}{10}$  per cent.). The effect was excellent, but the use of

carbolic spray during labour, which was also tried for some time, was given up in consequence of the post-partum hemorrhages which it appeared to induce.

In 1877, Adrian Schucking (*Berliner Klin. Wochenschrift*, No. 26) suggested that the vagina should be washed out at the end of the labour with a 5 per cent. carbolic solution, and that immediately afterwards the uterus should be continuously irrigated by means of the apparatus of which we gave a brief description in our former article on this subject. This method was carried out in eight cases, in five of which the patients had had severe labours, and all recovered satisfactorily, no temperature being recorded over 38.4° Cent. In the other three the injection was not begun until after the commencement of febrile symptoms, but an immediate and decided defervescence was the result. Professor Zweifel's objection to Schucking's conclusion, that in the five former cases the fortunate termination was directly due to the treatment, is, first, that the number of Schucking's cases is too small; and secondly, that equally good results are possible without any antiseptic treatment. With this objection most persons will, we think, be inclined to agree.

Professor Zweifel's own method, to which we shall devote the remainder of the article, is founded partly on the use of antiseptic measures, properly speaking, and partly on the adoption of the most scrupulous cleanliness in connection with the surroundings of the puerperal woman. In the first place, all vaginal examinations *during pregnancy* are in his clinic made only after careful washing of the hands and smearing with carbolic oil, the vagina being further washed out afterwards in some cases with 5 per cent. carbolic solution. The reason for these precautions is the possibility of infectious matter being introduced into the vagina previous to labour of its lying there and being sucked up into the uterus after the expulsion of the foetus. "This," says Professor Zweifel, "is a possibility which no one will deny."

The rooms and beds destined for the use of the lying-in women are carefully disinfected by burning sulphur in them in fireproof vessels, allowing about four grammes of sulphur to each cubic metre of space. The bedclothes are spread out so as to expose as large a surface as possible to the fumes, which after a few hours are allowed to escape by opening of the windows.

After each labour in which the hand has been introduced into the uterus, or where air has gained entrance to it, or gaseous decomposition occurred in it, the uterus is washed out with several litres of fresh water.

Since almost all the cases of puerperal fever are found to be complicated either with ruptured perineum, small rents in the vagina and vulva, or with the introduction of air into the uterus during some operation, the greatest care is

bestowed on all external wounds, to which Fehling's mixture of salicylic acid and starch is applied with the best results. Careful examination of the external genitals day by day, and the use of the thermometer, are also rigorously attended to. It should be added that at Erlangen Obstetric Clinic has a separate pavilion to itself, which was built in 1874. The number of births from April, 1876, to October, 1877, during which period the above method has been carried out "with pedantic strictness," has been 184, with a *single* death—that of a woman with cancer, on whom a Cæsarean operation was performed. In 143 cases the lying-in period was completely normal—that is to say, the temperature never exceeded 38° Cent., or at any rate, was never above 38° to 38.4° on more than one day. Out of the remaining forty-one, thirteen never had any morbid symptom except a rise of temperature on one or two days to 38° to 39° Cent., or on several days to 38° to 38.5°; twenty-eight had the symptoms of puerperal fever in a greater or less degree, but to these only twelve had protracted fever, inflammatory exudation, and showed clear signs of puerperal infection, and in only five cases was life ever in any apparent danger. It was further noticed that the cases which did badly were not evenly distributed through the whole period of observation, but were limited to the months of December, 1867, and January, 1877, and of September and October, 1877, in the form of small epidemics. On the whole, Professor Zweifel considers that his results are by no means inferior to those of Bischoff, and that they do not point to any necessity for introducing a more complicated antiseptic system into his practice. Moreover, Spiegelberg at Breslau has carried out a system into closely resembling Zweifel's since 1874, with the splendid result of only *five* deaths in *nine hundred* labours. 1

With such evidence before us it seems to be our bounden duty to urge on the medical profession in this country to habitually adopt the measures by which alone, as far as present knowledge goes, puerperal infection can be prevented—namely, scrupulous cleanliness and the use of antiseptic lotions, etc., for disinfecting the examining hand and the genital organs. Even the busiest practitioner can manage to invariably examine with carbolic oil instead of ordinary oil or grease, and in the most out-of-the-way places vinegar or brandy, as Professor Zweifel says, are sure to be found as substitutes for carbolic or salicylic acid.

We are not sure that in private practice the need of these precautions is not as great as in the hospital ward; for the risk of picking up infection somewhere, and conveying it to the lying-in room, is naturally very great when the

same man is seeing on the same day medical, surgical, and obstetric cases. He may go straight from a scarlet fever case to a woman in labour; and a most melancholy instance occurs to us in which a very valuable life was probably sacrificed in this way not so very long ago. The old discussions about puerperal fever, which we find reproduced even now in text-books on midwifery, are out of date in the light of our modern knowledge. We *know*, for example, that the woman who gets fever, peritonitis, and vomiting just after her confinement, has been infected with poison *from without*—whether bacterial or otherwise makes not the slightest difference; we *know*, too, how to prevent the entrance of this poison into the woman's system, we may be very helpless when it has once though entered it. Knowing all this, and knowing, too, the high mortality from puerperal fever, and that probably more than a thousand women die of it in England every year, is it not our plain and simple duty to try and carry out, at any rate, the major operations of midwifery in future with the same attention to antiseptic precautions as Mr. Spencer Wells observes in performing ovariectomy? —*Med. Times and Gaz.*, March 30, 1878.

#### TREATMENT OF PLACENTA PREVIA.

Dr. Charles Bell, *Edinburgh Medical Journal*, June, 1878, thus presents this subject:—There has hitherto been a remarkable degree of empiricism in the treatment of placenta previa, arising apparently from its alarming and dangerous character, which has induced some practitioners to endeavor to check the flooding without delay, even at the sacrifice of the child's life. Many remedies have in consequence been adopted, but the first in importance is the artificial delivery of the child by turning. This operation was first suggested by Ambrose Paré, and afterwards strongly advocated by Gillemeau, and it has been considered the most valuable remedy by the generality of the profession since his time, and it is certainly the most advisable when the os uteri is sufficiently dilated, to admit of its being performed more especially if the woman has stamina enough to undergo the operation, and there is an obvious tendency in the uterus to contract. Should there be no evidence of uterine energy, however, it will be necessary to have recourse to stimulants, and the ergot, given either by the mouth or by subcutaneous injection, in order to rouse the uterine energies if possible before attempting the operation. But some accoucheurs have objected to artificial delivery, from its being liable to be followed by fatal consequences. There is too much reason to believe, however, that these results are more frequently produced by its being injudiciously performed than its inherent character. Never-

1. For further information on this subject see also the *Zeitschrift f. Geburtshilfe und Gynäkologie*, ii, 1, containing papers by Schulien, Richter, and Langenbuch.

theless, the prejudice against it has led to two other operations being suggested as a substitute for it; the one by Sir James Simpson, the other by Dr. Barnes. The operation suggested by Sir James Simpson is the entire separation of the placenta, which he so strenuously advocated that some practitioners, ignorant of the history of the subject, have supposed that he originated it; but he only revived it, as it was performed by Portal two hundred years ago, and the success attending his operations seems to have induced others more recently to practice it; the most celebrated of whom, previous to Sir James Simpson, was Mr. Kinderwood, who reports several cases, some of which were successful, so far as the mother was concerned; others were fatal to both mother and child. It is very questionable if the cases in which the mothers were saved would not have been equally successfully had turning been adopted in place of entire separation of the placenta, when in all probability the child might have been saved.

The argument used by Sir James Simpson in support of this operation is in many instances quite untenable, as it goes on the ground that hemorrhage "chiefly and in most instances entirely proceeds from the other surface, namely, that of the placenta; or perhaps, more properly speaking, of one large maternal vascular bag, into which the blood of the mother is conveyed by the utero-placental arteries," and by its removal the hemorrhage would cease.

Upon this principle the placenta might be compared to a reservoir supplied by many pipes, and from which, when injured, fluid might escape; but, unless a check were put on the supplying vessels, its mere removal from its locality would not prevent the drain upon the source from which the fluid came; neither will the separation of the placenta check the hemorrhage from the uterus, unless it has energy enough to contract on its vessels, so as to prevent the circulation through them after the placenta is detached. Therefore, if the patient is so exhausted that the uterus cannot act, this operation is equally hazardous to the mother as turning, while it is almost certainly fatal to the child.

Dr. Radford, who seems to be favorable to this operation, says:—"I conclude that on a complete separation of the placenta the hemorrhage is immediately and completely suppressed, provided the uterus is in a condition so far to contract as to force down the head with the placenta upon the uterine openings." This is a very erroneous idea, as a little observation will show that the fetal head is ill adapted to act as a plug; and no internal pressure would have the effect of suppressing the hemorrhage, which can only be overcome by the same action on the part of the uterus and its vessels previous to the birth of the child as takes place after delivery.

Dr. Barnes, while he strongly objects to the

entire separation of the placenta, advises another operation on the same principle, which has for its object the extension of the partial separation of the placenta, then leaving the case to nature. Now, experience shows that the great cause of anxiety on the part of the accoucheur, and danger to the mother and child, is partial separation of the placenta, in some cases even to a limited extent; yet this author considers that, by this operation "the case is resolved into a natural labor." He founds this remarkable opinion on the supposition that "there is then an anatomical or physiological limit to the extent of placenta liable to detachment during the expansion of the womb," and that he has discovered that limit, and can discriminate it during labor, and he designates it the "cervical zone," "the region of dangerous attachment," and by separating the placenta from it hemorrhage ceases. This is, however, a mere hypothesis, as there is no part of the uterus from which the placenta can be separated artificially without danger of hemorrhage, unless uterine contraction immediately takes place. Therefore, this operation is equally, if not more, hazardous than the one recommended by Sir James Simpson.

The only tenable argument that has been used in favor of either of these operations is that they can be performed with less shock to the mother, and requires less manipulation, or manual violence as Barnes calls it, than artificial delivery. But this is a mistaken idea. For, in the first place, the os must be dilated to considerable extent before it is possible to introduce the finger sufficiently for the separation of the placenta; and, unless there is great tendency to detachment on the part of the placenta, a considerable degree of force will be required to effect it. This is verified in Dr. Reid's case, in which he could not force his finger into the anterior part of the uterus to which the placenta adhered; and every one must have experienced the difficulty of separating the placenta in hemorrhage occurring after delivery of the child.

There are other remedies which have been deservedly appreciated in unavoidable hemorrhage, namely, plugging and rupturing the membranes, both of which are most beneficial in the cases suitable for their employment.

Having referred to the most important remedies which have been employed in placenta previa, it now remains to decide in what cases they are most likely to be useful; and this is the most difficult part the accoucheur has to perform, and his success will, in a great measure, depend on his forming a correct diagnosis. If the os uteri is small and rigid, this will be rendered a very difficult matter. Therefore our duty will be, in the first place, to have recourse to plugging, until this state of the os is overcome; and the best kind of plug is the India rubber bag filled with air, which Dr. Keiller



had the merit of introducing into midwifery practice. This is infinitely superior to "Dr. Barnes' bags," as they are called, which are filled with water. The bag filled with air not only affords a light and good support, but it enables the accoucheur to ascertain if the hemorrhage is still going on, and it is easily applied; whereas if a sponge or handkerchief is employed, it is introduced with difficulty, and the blood is prevented escaping, so that the accoucheur is kept in the dark as to the continuance of the hemorrhage, unless the general condition of the patient enlightens him.

If the labor pains are active, it will be desirable to remove the plug to ascertain what progress has been made in the dilation of the os, and if it is sufficiently dilated, or easily dilatable to admit of the hand, and the child has been ascertained to be alive, and the hemorrhage profuse, there ought to be no delay in delivery by turning. But if the child is dead, and the mother much exhausted, it may become a question if the entire separation of the placenta may not be attempted, especially if there is a natural tendency to its being detached by the uterine contractions. If the os uteri is not sufficiently dilated to admit of either of these operations, and if the case is one of central presentation, the plug should be again employed, as it is probable that the hemorrhage is caused by the placenta being put on the stretch by the pressure of the child's head, and the support afforded by the plug may have the effect of checking it until labor is further advanced. But if it is a partial presentation, and the distended membranes are found occupying the entire disk of the os, rupturing them may have the effect of checking the hemorrhage, by allowing the uterus to contract on the vessels from which it was flowing, just in the same manner as takes place when they are ruptured in accidental hemorrhage. In regard to Barnes' operation, I cannot imagine any case in which it would be justifiable.

#### CONTRIBUTIONS TO THE HOT WATER TREATMENT OF UTERINE HEMORRHAGE.

In the *Memorabilien*, Heft 4, 1878, Dr. Alois Valenta reports three very desperate cases of uterine hemorrhage treated by injections of hot water.

The first case was one of protracted abortion in a multipara at the fifth month. The hemorrhage had occurred frequently during the past month, and the patient was anemic and almost lifeless. An injection of hot water (40° Reaum., equivalent to 122° Fahr.), with some carbolic acid in the water, was applied through Fritsch's intra-uterine catheter, and the subjective and active signs clearly showed contraction of the uterus with expulsion of shreds of remaining placenta. It was necessary to repeat the

injections on the two days following, the temperature of the water being 36° Reaumur (113° Fahr.) There was no hemorrhage after this, but a peritonitis with exudation developed, from which the patient recovered, and was entirely well within six weeks.

The second case was one of abortion in the beginning of the third month. The patient was exhausted from repeated loss of blood, and in her case, as in the first, pieces of ice, ice-water, ferri sesquichlor, and ergotine injections had been used without any good result, also the tampon. The finger was introduced and portions of the membranes taken away, and hot water injected with permanganate of potash in it, temp. 42° C. (107½° Fahr.), with the best results. There was a slight tendency to perimetritis, but the patient was out of bed in two weeks.

The third case was one of excessive metrorrhagia, on the tenth day after labor at full term in a primipara. There was considerable hemorrhage, caused by a portion of detached placenta, which was scraped away, and an injection of water, temp. 37° Reaum. (115½° Fahr.) used. There was no more hemorrhage, and the patient was well in a short time.

*Critical Remarks.*—The first point to be observed is that the patient, as soon as the hot water injections were commenced, could clearly feel the contractions of the uterus, as one could himself observe the contractions. It appears, therefore, to be proven from the facts that the *hot water injections induce without doubt quick and energetic contraction of the uterus.*

2. An important point, very favorable to the hot water injections in preference to the cold, is the consideration that by the latter, so far as the body-heat is concerned, patients very much reduced will always be deprived of more warmth, while *by the hot water injection warmth in an inverse proportion will be produced*, which is essential in very anemic patients.

3. It is also especially to be noted that the general feeling of the patient from injections of hot water is an agreeable one, while the cold water treatment is decidedly unpleasant.

4. The resultant reaction in the cases observed, after the hot water injections, is not only not more violent than the cold water injections, but, in the judgment of the writer, milder.

5. The temperature of the water should be from 40° to 42° R. (122° to 126½° Fahr.), with some disinfectant, as carbolic acid or permanganate of potash. Dr. Atthill, of Dublin, says, that in these cases the water must not be less than 110°, and may safely be 115° Fahr.

6. This treatment of uterine hemorrhage should no longer be resorted to as a last refuge, but should be adopted as soon as possible in cases of this kind.

## INGROWING TOE NAIL (SO-CALLED).

What is commonly denominated ingrowing toe nail is in reality nothing of the kind. In these cases you will find that the nail is all right. What then is the matter? The young woman now before you presents a very useful case, because it affords an example of an affection which is so common; and I take more interest in explaining cases of this kind than in the most elaborate and difficult operations, because you are liable to meet them every day in your practice. This matter of so-called ingrowing toe nail, I am sorry to say, is, as a rule, entirely misunderstood, and improperly treated. The nail grows into the matrix, which is simply an involution of the skin, and continuation of the periosteum; and a portion of the nail lying in the groove of the matrix is smooth and rounded, and terminates in layers of epidermis. Through these layers a part of the nutrition of the nail goes on.

Here is an instance in which the tissues have become swollen and highly inflamed, and protrude over the nail. What is the explanation of this state of affairs? A tight boot has been worn, which presses the matrix forcibly against the nail. This occasions tenderness, and in order to relieve it, the edge of the nail is cut. This procedure results in the formation of granulations. Then the scissors are inserted, notwithstanding the severe pain thus occasioned, and more of the nail cut away. A fatal mistake. The surface becomes ulcerated and granulating because, instead of the normal bulbous extremity of the nail, you now have a sharp, ragged edge pressing into the inflamed tissues. It is rough, harsh and irritating, instead of being smooth and rounded. If you have ever compared the beautiful and symmetrical sting of a bee with the rough and uneven point of even the finest cambric needle, under the microscope, you will understand exactly the difference to which I refer. The needle seems as clumsy as a crow-bar.

Now, as to the treatment. Our friend here must wear a loose shoe, in the first place. This is a *sine qua non*. Then the maltreated nail must be allowed to grow and regain its proper shape. While this is going on she will suffer considerable pain, but this will be her penance for having done wrong. By the end of six months the nail will have regained its normal outline. If much inflammatory action should continue while this is going on a slippery elm poultice may be applied from time to time. When the granulations become exuberant, a little pinch of dried alum will be found to be very effective in reducing them. Some persons suffering from this affection find great relief in the daily use of the alum. The chances are, however, that our patient will become dissatisfied in waiting so long for a cure to result, and resort to the fatal scissors, but we

can at least give her fair warning of the long course of suffering which by so doing she will bring upon herself.—*Med. and Surg. Reporter.*

## TREATMENT OF ULCERATION OF THE OS UTERI.

All acquainted with the practice of an out-patient department for the diseases of women, cannot fail to have been struck by the very numerous cases of ulceration of the os uteri presenting themselves for relief. The cases are so common, the distress of the affection so debilitating, the discomfort to married life so great, and the cure so within the limits of the ordinary practitioner, that we hope to do good service by a few remarks on the subject. We shall classify the cases, dividing the os into three zones:

I.—Ulceration at the os uteri on one or both lips.

II.—Ulceration extending to half the inferior part of the cervix uteri.

III.—Ulceration involving the whole of the cervix and os.

I.—Ulceration at the os uteri on one or both lips.

1. Very many of these cases pertain to the newly-married, and are undoubtedly the result of excessive venery. There is always a history of nausea or retching, backache, a white or muco-purulent vaginal discharge, some scalding on urinating, vaginitis or vaginismus, and constipation. An examination by speculum reveals an abraded surface, some discharge about the os, and more or less uterine congestion. 2. Other cases belong to multiparæ, who have had untoward labors whereby the external os has been lacerated, and one or other lip has become inflamed, and taken on unhealthy action. This condition is generally a bar to future pregnancy. In both classes cervicitis may be present. The lesion does not affect the cervical canal to any extent.

II.—Ulceration extending to half of the inferior part of the cervix uteri. These cases are very common, occurring in women who have had difficult or many labors. The extraction of the child has divided the os into two portions, of which the posterior has been generally found to be the larger. There is a more or less free muco-purulent discharge from the vagina, and in addition to the symptoms enumerated under Class I, the patient complains of dragging pain in either one of the groins, with pain extending to the knee of the same side. On digital examination the finger readily enters the cervical canal, and ulceration is detected. Pressure on the uterus elicits pain; the fundus is somewhat displaced; the whole organ is invariably enlarged. The extent of the disease is not seen by the speculum, which tends to bring the divided parts together; hence the necessity of a careful digital exploration.

III.—Ulceration involving the whole of the cervix and os. On exposing the parts the cervix is found to be inflamed, soft, tender, much enlarged. Cervicitis is marked. The os is generally round, and the cervix is somewhat flattened at its free extremity, as if it habitually rested on the perineum. This affection is usually noticed in old cases of prolapsus, in virgins and in sterile women. The cause may be attributed

to flexions, relaxation of the uterine ligaments, and excessive venery. In these cases the pain extends along the spine and shoots down to either knee. There is pain in nearly every position the body can assume. Care is required to discriminate between these cases and those of a malignant type.

*General Treatment.*—We cannot too forcibly inculcate the necessity of absolute rest in the horizontal position. By this means congestion about the uterus is lessened, and the ulcerated surface prevented from impinging on any part. The diet should be liberal. The bowels should be kept well opened. All marital intercourse should be forbidden.

*Medicine.*—There being generally a state of anemia to contend against, we would first recommend the vegetable tonics and cod-liver oil, afterwards the ferruginous preparations. Where any induration exists, iodide of potassium should be administered. It is essential to raise the tone of the body, as concurrently with its improvement, so the healing process will be expedited.

*Topical Applications.*—Much care is required in deciding whether to deplete or not in choosing the form of caustic to be applied, and in prescribing an effectual injection. In all cases where the veins are prominent about the os, we would commence either by leeching or puncturing with a lancet. The latter we prefer. In cases of slight ulceration, touching the part with nitrate of silver or chromic acid, followed by a plug of cotton wool steeped in glycerin, is generally effectual. Should the ulceration be obstinate, we would apply fuming nitric acid. The cotton wool saturated with glycerin must be introduced daily. Where the lips of the os are divided, it must be concluded that the inflammation has extended along the cervical canal. In these cases the *external* os should be well burnt with the caustics named; if necessary, the actual cautery should be employed, but the cervical canal must not be molested. Failing these, plugs of iodized cotton wool should be applied daily. We have been very much pleased with the success in these cases following the application of iodized phenol, an escharotic and alterative introduced by Dr. Batty, of Georgia, U. S. [℞ Iodinii, ʒss. Acidi carbolici, ʒij. Aquæ, ʒij. Misce. Fiat solutio.] The healing process has certainly been materially accelerated by its use. We have simply applied it on cotton wool, leaving it for two days against the ulcerated parts, and then renewing it. Where the whole of the cervix is involved, the patient should be constantly on her back, glycerin should be first tried daily, and, if no improvement be noticed, the iodized phenol should then be used, and, if necessary, the actual cautery applied to one of the lips of the os uteri. Where there is active inflammation, hot-water injections thrice a day are beneficial; glycerin and tepid water effect most good when the ulceration is healing; alum lotion is a safe stimulant in tardy repair of the lost mucous membrane.—*From The London Doctor.*

## TREATMENT OF SORE NIPPLES.

Dr. Haussmann, of Berlin, recommends very highly the use of lotions containing five per cent. of carbolic acid, in the treatment of erosions of the nipples. He claims that the carbolic acid not only cauterizes superficially the eroded spot, but that it penetrates into the openings of the smallest lymph-vessels which have been laid bare by the erosion, and destroys at once any parasitic germs or infectious organic substances that have been conveyed to the nipple by the mouth of the child or the hands of the physician or nurse, or of the woman herself. In so doing it prevents the development of almost all inflammations of the mammary gland itself. Of course the nipple must be carefully cleansed every time the child is put to the breast.—*Centralblatt für Gynäk., No. 10.*

## ON HEADEACHE.

A lecture delivered in Gresham College on May 10th, 1878.

By E. SYMES THOMPSON, M.D., F.R.C.P.,  
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The Founder of our College desired that the Professors should deliver addresses of practical utility to the citizens of London, and it is my wish to carry out the intention of Sir Thomas Gresham, and to give to any here who suffer from headache, or have around them those who do so, such suggestions as may be of service in relieving pain and preventing the establishment of what might otherwise prove a life-long misery.

Headache is merely the name of a symptom which may occur in a multitude of disorders. It is often met with in the course of jaundice or kidney disease, and is then regarded as part and parcel of the deep underlying ailment. The term, however, is employed mainly to describe those conditions in which head-pain is the pronounced and manifest evil.

The better to understand the nature and varieties of headache, some description of the parts involved is needed. This anatomical description must be of the most general kind.

Beginning from the outside, there is first the hair, next the scalp, which covers the bone, next the bone covered by periosteum, and next the brain covered in its turn by the dura mater, a fibrous tunic which embraces and keeps it together, and sends partitions between the hemispheres and between the larger (cerebrum) and smaller (cerebellum) brain. The dura mater supports the vessels which convey blood to and from the brain.

This rapid survey sufficiently indicates that, as the parts affected are various, so the painful sensations to which these parts are subject may be various in kind, in degree, and in results.

Headache, like any other pain, is given as a

warning, not to be slighted but to be attended to, and very often it is the earliest evidence of removable mischief, which, if neglected, passes into hopeless disorganisation.

The scalp may become tender and painful from hard brushing, parting the hair in an unusual place, or hanging on to it a weighty superstructure.

Those who have too much hair or wear it too long have headache sometimes in consequence, and persons leading a sedentary life with excess of food and wine, find the tonsure promote coolness of head and freedom from oppression. The malady as it affects gouty persons is often accompanied by heat of head, and it is a good thing for gouty old gentlemen that they are often bald. *Gouty* headache is accompanied by fulness, flushing of the vessels, and, if neglected, may lead to giddiness and apoplexy.

*Rheumatic Headache* attacks those who are not comfortably housed and well supplied with warming food; it favours persons living in damp-living situations or exposed to raw winds when imperfectly clothed; it fixes itself in one part of the aponeurosis between the scalp and skull; and notwithstanding warmth, anodyne embrocations, and alkaline draughts, it is very apt to remain for several days, and only yields to iodide of potassium and sarsaparilla.

This differs from *neuralgic headache* which occurs in plunging paroxysms like tooth-ache. Often it depends on a bad tooth, and is removed with it, or it is intermittent and dependent on ague or marsh poison, in which case it may be cured by a good dose of quinine. Sometimes intense neuralgic headache depends on a swelling on the nerve as it passes a foramen or hole in the skull, and then mercury or iodide of potassium must be relied upon.

*Nervous Headache*, as it is called, is not like *Neuralgia*. To depict a case: here is a pale, thin woman, with bright eyes and an anxious over-wrought expression, who tells us she is a martyr to it; sometimes she is free for weeks, but when she is "put about" or worried, the head is almost constantly aching, unfitting her for work and making life a burden. It cannot, she tells us, be due to over-eating, for she takes little besides tea and toast; she never takes any breakfast, and the pain is worse in the morning. The pain is, indeed, "the prayer of the nerve for healthy blood." On inquiring the cause, we find that it began first years ago, when her nights were disturbed by a sick child and by her husband's misfortunes.

Cases of this kind are common among seamstresses and underpaid washerwomen, but they are not rare in the higher walks of life, for the ladies who look so graceful and prosperous in their luxurious carriages are often harassed by anxieties we know not of, and tormented by carking cares to which the poor are strangers. These are cases in which valerianite of zinc is

useful; the attack may be lessened by *guarana*, the new popular tea-like drug; but to supply the worn nerve with good blood is the real point, and food containing fat is essential, as milk and cod-liver oil, and let bread and milk take the place of tea. Although wine or spirit *taken with food* may be of real temporary benefit, it is the doctor's duty in cases like this to discourage the use of alcohol, for soon a craving for it will be developed which, from weakened powers of resistance, the patient will be unable to escape.

The very opposite conditions to those just described give rise often to headache. I mean not defective or lacking nourishment but over-eating. Bad cooking or imperfect mastication may be the cause, but generally eating too fast or eating too much is the evil. Some may remember my allusion in this Hall years ago to the evil of *Luncheon Bars*. The observations were quoted in some of the commercial papers of this city, and I hope have been taken to heart by some; there can be no question that many become dyspeptic and get headache because they allow themselves but a few (five or ten) minutes to "bolt" (no other term is appropriate) a plate of meat, with beer and perhaps cheese and salad, and are at their desk and bustling work without a moment's interval for the stomach to attack the food while the brain is untaxed. If the time is very short it is better to take a light meal than to "bolt" a heavy one.

In this dyspeptic form of headache the feet get cold, the head hot, and face flushed; soon a dull heavy pain comes with throbbing at the temples. The tongue becomes coated, mouth clammy, breath offensive. The pain shifts about, and is increased in the upright posture. The patient declares, perhaps, that the headache cannot be due to indiscretion in diet, for he had a specially light, wholesome meal the previous day; on inquiry, it will be found to be due to an error two or three days before, or most probably a wrong plan long followed.

Headache from over-eating in children, may be relieved by an emetic. Growing children must have their digestion in order, or they will be stunted in growth, and imperfect in development.

Headache from over-drinking, comes on the morning after the "bout," and may be unaccompanied by any sign of disorder of digestion, for the patient endurance of the stomach is almost beyond conception. It is relieved by brandy and soda, or better by soda water, or even by cold water alone.

Let me now bring before you a typical case of plethoric or congestive headache.

Here is a burly, fresh-coloured gentleman, who looks the "picture of good nature," and whose face certainly does not pity him; but if you look at him attentively, you see the red

cheeks are due to tortuous vessels and stagnant circulation. His lips, too, are bluish, and the nose red. When he stoops he flushes deeply. He complains of noises in the ears, and pain in the bridge of the nose; and he gets so sleepy after meals that he *must* have his nap. His habits are sedentary, and he becomes less and less disposed for walking. He has, perhaps, lately retired from business, having made his fortune. He considers his diet spare, as he seldom eats meat more than three times a day, and rarely takes anything between lunch and dinner, and he is "doing Banting" to the extent of taking a biscuit with his cheese and port. Two or three times he has had nose bleeding. This may probably have saved him from apoplexy, and till he gives up his port, and two of the three heavy meat meals, and leads an active life, he will suffer from his headache, and perhaps some morning will have an apoplectic seizure and never regain consciousness.

Time will not allow me to speak of the headache of hysteria or hypochondriaes.

*Sick Headache* is primarily due to nerve wear, but being treated by anti-dyspeptic remedies, it becomes accompanied by, and eventually chiefly caused by, stomach disorder. It is apt to attack those who inherit a predisposition to affection of the brain. The grandmother of the patient was perhaps epileptic, father subject to tic, one brother consumptive, and another insane. It is periodic in its onset, necessitates complete recumbency and withdrawal from noise, glare, and bustle. The sickness is the consequence, and not the cause of, the headache, just as sea-sickness is dependent on disturbed circulation in the brain, secondarily affecting the stomach. In treatment, many things, *e.g.*, sal. ammoniac, mindererus, coffee, or chloral, give relief, but our sheet anchor is a prolonged course of iodide of potassium.

The headaches of children require special care and discrimination; those of measles and scarlet fever soon pass away on the appearance of the rash. They are at times as severe as is the characteristic backache of small-pox.

School-boys and students sometimes get a severe form of headache from overwork, which needs vigorous and decisive handling, or it is followed by organic disease. Several distressing cases of this kind have fallen under my care. In such cases cessation from hard work is the first essential. Country life or a sea voyage are the remedies. These are cases in which the brain tissue is deteriorated and softened either from strumous disease, or overstrain of feeble brain. In fevers the consistence of the brain is reduced, so that its specific gravity is less than it should be. In insanity it is harder and heavier, the fluids around being increased. The proportion of phosphates, too, varies consider-

ably; hence the suggestion that phosphorus is the remedy in such cases.

Disease of brain is sometimes painless, for the brain substance has no sensitive nerves, and in hernia cerebri you can touch the brain without the knowledge of the patient; but if you press firmly on it, uneasiness or convulsion occurs.

If the membranes covering the brain are affected, there is sure to be pain, generally of an abiding kind, and in a fixed spot. In such a case the pain is increased by engaging the patient in conversation, instead of being diminished, as is usual in other forms of headache.

A large abscess may destroy a hemisphere without symptoms, as in a case once under my care, but a small tumour on the surface may give rise to acute pain, and perhaps paralysis. Tumours are of many kinds, fibrous, cystic, aneurismal, or cancerous. This is a subject for a lecture in itself. I can only allude to it here. Tumours often cause epilepsy, as well as headache. If the tumour is aneurismal, it may burst into the brain, with an immediately fatal result.

The treatment of epilepsy has of late greatly improved, and at least, partial benefit may now be counted upon. Typical sick headaches are, as I have said, allied to epilepsy. They are commoner now in these days of high-pressure and competition than formerly, for disorders of the nervous system have taken the place of the disorders of the circulation which so frequently affected our easy-going free-living ancestors.

A few words now about treatment. First *preventive treatment*. Had this been more successful in times past many valuable lives might have been saved.

Isaac Newton always found that when he worked at the theory of lunar irregularities it made his head ache, but it never ached when studying any other subject. He neglected the warning, and after resuming his intense application to this abstruse subject, the severe illness which ultimately cost him his life, commenced; and thus the world lost with Newton the power of mastering other phenomena as important perhaps as that of gravitation.

The value of one such life who shall estimate!

Congestion of brain, when habitual, leads to feeble memory, dimmed intellect, weak sight, or perhaps even to blindness and deafness; a cautious bleeding (old-fashioned remedy though it be) may prove the best treatment in such a case.

Symptoms ought to be *early* attended to; work must not be too prolonged or intense, nor must the intervals between meals be too long, or the quantity taken unsuitable to the habits and requirements of the body. Hard mental work cannot be done without good sustaining food, any more than an engine can work with-



out fuel. Let the diet be regulated; let the clothing be ample but not excessive; let the digestion be kept in order, the exercise be appropriate, the rooms airy.

These are general principles applicable to all. But remember that headache is a symptom. Its cause must be discovered and obviated.

When ascertained, if found to be dependent on rheumatism, a great effort should be made to secure a dry comfortable house, on a gravelly or sandy soil. Flannel should be worn near or next the skin, vigorous friction after the morning bath, a diet nutritious but not such as to develop acidity, for many forms of rheumatic headache are promoted by sugar, by porter, and sweet wines.

I need not repeat what I said about the character of rheumatic headache, that it is superficial, accompanied by tenderness increased on moving the scalp; nor need I allude further to its causes or the treatment, which is that of rheumatism generally.

The *congestive* or *plethoric* headache may be known by the sense of fullness and weight in the head, with occasional giddiness. The pain is throbbing, it comes and goes, it may be produced by stooping, sleeping with the head low, wearing a tight necktie (or "choker," as it may more appropriately be called), or even by tight stays. This form of headache is not confined to those who indulge in good living, but it affects those, too, who are pallid and bloodless, for persons with too little blood are even more prone to congestion than those with too much. You will all see how essential a sound diagnosis must be under such circumstances, for what may cure the full-blooded, will certainly greatly injure those whose blood-supply is deficient. These cases may be benefited by derivation, *i.e.*, attracting blood to other parts, as by warm baths, or mustard plasters, by cupping or by vigorous friction. Suitable drugs are too manifold to name.

In *nervous* headache and headache from overwork, the grand desideratum is *rest* for the over-taxed organs. As with rheumatic subjects, those prone to *nervous* headache are like barometers, and feel every change of weather. The ordinary pressure of the atmosphere is 15 lb. to the square inch, a fall of one inch (from 30 to 29) will take off  $\frac{1}{2}$  lb. pressure on every inch of surface, or about 1,000 lbs. over the whole body. If you go to top of Mont-Blanc, you reduce pressure by one-half.

Humidity and dryness have an equally marked effect. In dry air, moisture is given off by the skin, and thus the amount of fluid in the body is reduced, but in damp air this evaporation is checked. Thus, many people who have headache in low-lying damp swamps get well in dry air.

The electrical conditions of the air tend to influence the feelings of sensitive invalids, and

when a thunder-storm is imminent, many people suffer from headache, which is relieved when the storm has passed off. Again, a cold, raw, north-east wind blowing in the face will often give headache either to a person subject to rheumatic, congestive, or nervous headache. Thus travelling, often so beneficial, may become a source of evil.

The palliative remedies in many such cases are numerous. Eau de cologne and camphor water are often comforting. Ice is refreshing, or iced seltzer water; smelling salts to the nose, or snuff may be useful. A mixture of ether and aromatic vinegar is grateful at times.

In *dyspeptic* headache, the pain is at the back of the eye, with a throbbing at the temple on movement. Care in diet is the grand requirement. If due to acidity a simple antacid and carminative, as soda with ginger, or rhubarb and magnesia, will do great good.

Sedatives are generally *bad*, they either fail to relieve, or stupefy the patient.

In this lecture, I have felt it better to describe a few main varieties of headache clearly, so that you may realise the nature and treatment of each; although in practice each case may have something in common with two or more varieties.

Thus a nervous dyspeptic may suffer from sick headache, or a full-blooded plethoric person from gouty and organic as well as congestive headache.

We cannot treat every case, even of the same variety of headache, on the same plan; every case is a study in itself, and that practitioner is the most successful who best adapts broad principles to the personal idiosyncracies of the sick person before him.

Do not neglect a headache nor attempt to remove it by a dose of opium, but—*find out its cause*—and *then* think no pains thrown away in removing it; few things are more easily dealt with in an early stage, and few maladies try the skill more when they have been long established.

Much may be done by judgment and discretion, and in a large proportion of cases cure may be counted upon if the effort to attain it is proportionate to the importance of the end in view.

The *prognosis* must depend entirely on the *diagnosis*; if there is organic disease of the brain recovery cannot be counted upon; happily, however, such cases are quite exceptional. In the *Rheumatic, Neuralgic, Congestive, Dyspeptic, and Nervous* varieties, cure should be determinably sought and found. In *Sick Headaches* alleviation and diminution of frequency in the attacks is certain. In *Gouty Metastatic Headache* the prognosis is less hopeful, and when the disorder depends on jaundice or deep-seated disease of distant organs, recovery from the

headache must always be dependent on the course of the malady from which it springs.

Let me wish you all freedom from the disorder of which you have heard so much, and let me urge you, if you are so unfortunate as to suffer, to set yourselves to find out the cause, and, in many cases at least, the removal of the evil will then be easy.

#### REPORT ON SKIN DISEASES AND SYPHILIS.

By C. R. DRYSDALE, M. D.

Senior Physician to the Metropolitan Free Hospital.

All who have had often to treat of the various forms of ringworm, or disease of the hairy scalp, must be desirous to know all that can be said as to the nature of their diseases. Bazin and Hardy, of the Hôpital Saint Louis, have, in my opinion, done more to throw light upon these obscure diseases than any other authors.

The classification I adopt, following these gentlemen, is threefold, first of all favus, then the three in one, herpes circinatus, tinea tonsurans, and sycosis, and lastly, tinea decalvans.

These diseases are all due to vegetable parasites, are all contagious, although favus, tinea tonsurans, and herpes circinatus are the only ones admitted to be contagious by some authors of note. Sycosis is evidently contagious, in my opinion, since I have latterly seen it in more than one case in company with tinea decalvans. Sycosis is easily confounded with a simple inflammation of the hair follicles where no vegetable parasite exists. The barber's razor in Paris is, in my experience, the most common cause of contagious sycosis, the only disease which should bear the name.

I am also quite convinced that tinea decalvans is a contagious disease. I have seen it occur in three children of the same family, and epidemics of the disease occasionally have been met with in schools. The different forms of tinea are inocuable, as has been shown by the experiments of Bazin and Köbner. In most cases the contagion of these diseases is indirect by means of the air; and contagion has been known to take place from certain animals to man. These are subject to favus, which is communicable from these rodents to cats, and from them the disease, according to Hardy, has been communicated to man.

With regard to age, favus and tinea tonsurans are only seen in youth; herpes circinatus and tinea decalvans are met with at all ages, and sycosis is seen only among adults and in the male sex. Tinea tonsurans and especially favus are most tenacious in scrofulous children, or in ill-fed and overworked young persons.

Mr. Erasmus Wilson is the only modern writer on skin disease who seems to contest the vegetable origin of the cells seen in this complaint. Every one else is agreed as to the parasitic na-

ture of the larvæ in favus and ringworm. There is some difference of opinion as to herpes circinatus, sycosis, and tinea decalvans; but in herpes circinatus the parasite is easily enough found, and is identical with that seen in ringworm; moreover, all who have treated the latter complaint know how frequently the skin becomes inoculated from the hair disease. As to sycosis, it is also clearly, in my opinion, of parasitic nature. The parasite is not so easily found in tinea tonsurans, but if carefully looked for, it will be found on some hairs, though not in all.

Sycosis has frequently been found in company with herpes circinatus, and I have under my care at present a gentleman in whom sycosis is accompanied by tinea decalvans, so that if either of these diseases is due to parasitic growths sycosis is manifestly so.

With regard to tinea decalvans, excellent authors assert both that it is non-contagious, and that no one can discern the parasite which causes it. As to contagion, I cannot comprehend how any person of experience can deny that this disease is occasionally communicated from one member of a family to the other. And as to the parasite, if persons had not found it, it is because they did not know how to look for it. It is not found on the hair, but on the epidermic scales which exist on the denuded spots of hairy scalp.

The parasite of favus seems to be quite distinct from that which produces the other diseases of the hairs; but there is some tendency on my part to suppose that the parasite which causes tinea tonsurans, sycosis, and herpes tonsurans, may occasionally give rise to the parasite which causes tinea decalvans.

Treatment is here of the greatest importance. In the days of Molière physicians seem to have been contented with making a more or less probable diagnosis of diseases, but to have been able to do little to cure them. Let us hope that we moderns are less ambitious of talking about disease in a learned way, and more anxious and capable to give patients relief. In the treatment of the various diseases of the hair we have enumerated, the theory is to destroy the parasites, and also perhaps to endeavour to remove the scrofulous taint which makes so many of these diseases nearly incurable. The plan of epilation, as practiced so generally in Paris, which extends a little beyond the diseased parts, is good, but rather heroic. The hairs are pulled out with tweezers, and the surface is then rubbed with some mercurial ointment or lotion. In this country the use of blistering fluid to the parts, which have previously been denuded of hair by means of scissors, or shaved, is often practiced, and gives for the most part excellent results. Some careful practitioners cut off the hair from the whole scalp, and then use parasiticides. One of the most important

points is to isolate the diseased children, and to take care that they do not use the same combs or brushes of their brothers, sisters, or school-mates. Cod-liver oil and iron, with nourishing diet and country air, are useful for delicate children attacked with ringworm.

M. Lallier, of the Hôpital Saint-Louis of Paris, has recently been interested in the question of the parasite of *tinea decalvans*, and has shown that the spores are small, of a diameter of about three-thousandth of a millimètre, transparent, and found in groups. He alleges that the spore penetrates into the sheath of the hair, where it proliferates, atrophies the bulb, and prevents the reproduction of the bulb. He has found the spores almost on all parts, and that, when there is the slightest amount of pityriasis, they are found in quantity.

It is certainly difficult to account for those cases of baldness which take place in a few days in adults by the theory of parasitism. Some observers allege of this form that it depends on want of nerve supply. Yet I hold by analogy that such cases even are due to parasitic agency.

Of course epilation, as recommended by Hardy, is of no use where there are no hairs to pull out, as in cases of *tinea decalvans*, and hence repeated blistering with the liquor-vesicatorices of the British Pharmacopœia is the most potent and universally useful of all remedies in ringworm or *tinea decalvans*.

*Animal Vaccination.*—The editor of the *Pacific Medical and Surgical Journal* remarks that bovine virus appears to be losing ground in professional favour in America, because he has noticed in many journals that physicians have encountered so much failure with that purchased in the east of the States, that they have been induced to fall back upon humanized lymph. I believe that animal vaccination would entirely supersede humanized if only there were a constant and ample supply of fresh and active lymph, and perfect security that the person who furnished it was honest. If all were as honest as Dr. Martin, of Boston, U.S., and Dr. Warlomont, of Brussels, I am convinced that animal vaccination would do away with the anti-vaccination craze so common at this moment in that land of crazes, England.

#### MR. ERASMUS WILSON ON ACNE.

Wilson defines acne as a folliculitis developed at puberty (*Medical Examiner*), consisting of a conical red pimple, which either suppurates or becomes a chronic tubercle. He does not admit that the folliculitis of adults which appears in the face is true—although it has been styled *acne rosacea*. He advises in the treatment of acne juveniles frictions combined with kneading and pressure of the skin, with inunction of the hypochloride of sulphur ointment. This is to be performed at night, and washes off in the

morning with much soap and water. For true acne rosacea, the old treatment by means of hot-water sponging of the face, followed by the use of a lotion of bichloride of mercury of two grains to the ounce, is occasionally of very great service. Arsenic is much recommended by Wilson for acne juveniles. I do not think it is advisable to give such a doubtful remedy for long, as it certainly fails in the great majority of cases to prove of any service.

#### THE INFANTILE DIARRHŒA OF SUMMER.

At the stated meeting, April 16, 1878, of the New York Academy of Medicine, *Medical Record*, May 25, 1878, Dr. J. Lewis Smith made the following remarks:

This summer diarrhœa, as an epidemic, he said, is confined to the cities, being scarcely at all known in the country. In New York it makes its appearance about the middle of May, or earlier, if the season is unusually warm. From that time the cases increase in number and severity until the maximum heat of the year is reached, during July and August. After the latter month it begins to decline, and it at length ceases to be an epidemic about the first of November. Its prevalence and severity is found to correspond with the degree of heat; yet hot weather is not the cause of it. In the rural districts the temperature may be just as high as in the city, but this summer diarrhœa does not occur as an epidemic there. It is, therefore, pre-eminently a disease of cities, and we must look for some other source for it than simple high temperature. Undoubtedly, one of the most important causes is to be found in the very free exhalations arising from decomposing animal and vegetable matter during the heated term; and the disease is always most frequently met with in those localities where the accumulation of filth is the greatest. Dr. Smith stated that some years ago, while making an inspection of certain portions of New York for the Citizens' Association, he had become fully satisfied in regard to this point. He remembered one block of tenement houses particularly, in which there was little or no drainage, and the noxious exhalations were peculiarly abundant and offensive; and here there was scarcely a young child in the whole block that escaped the affection. Of course we do not know exactly in what way these noxious exhalations, due to the effect of intense solar heat upon filthy streets and domiciles, produce the results noted.

But such atmospheric conditions are not the only source of the trouble. Another very potent cause is found in the diet given to children in our cities. Hence it is that mothers are always so anxious about their infants during their second summer, and it is well known that bottle-fed children are far more severely affected

than those which are not. Indeed, it is very rare that an infant under six months, which is artificially nourished, escapes the disease in the city during July and August. The two main causes may be set down, then, as atmospheric and dietetic.

Dr. Smith then went on to speak of the pathology of the disease, making the preliminary remark that he thought he had had as good opportunities for observation in this connection as any one in this country. In looking over his notes he found that he had the records of over eighty autopsies, all made in warm weather, during the prevalence of the epidemic. There could be no doubt, he said, that it is essentially an inflammatory disease, especially after it has continued a short time. For the first few days there may be no evidence of inflammatory action; but at the end of a week or so, lesions of this character are well marked in the intestines, and particularly the colon. Ordinarily the surface of the stomach is quite pale, and consequently presenting no indications of gastritis. Yet, notwithstanding this fact, vomiting is a very frequent symptom of the disorder. Occasionally there is some hyperæmia of the stomach (more frequently observed in infants of about three months than any others), but, as a general rule, it is entirely absent. The duodenum also generally presents no lesions. On entering the jejunum, however, we find vascular streaks and patches, and these are still more marked in the ileum. The ileo-cæcal valve is frequently the seat of the severe inflammation, and sometimes it is materially thickened. In the large intestine the evidences of inflammatory action are yet more prominent, and there is apt to be a vascular and tumefied state of the entire mucous membrane. The sigmoid flexure is usually the most profoundly affected of all, and this seems to be due, in great part, to the irritation produced by food, which remains longer in contact with it than with the other parts. At the same time we find, along the whole course of the large intestine, the solitary glands or follicles standing out prominently.

In the more protracted cases additional lesions are observed, such as ulcerations, which are more marked in the descending colon, and correspond in position with the follicles, in which the inflammatory action has thus gone on to the point of ulceration. Besides the intestinal lesions there are still others which are more properly complications. As long as the disease lasts, there is always progressive wasting of the whole body. In this some wasting of the brain is involved, and therefore, after the disease has continued for some time, we are very apt to have developed that condition of the encephalon which Marshall Hall and Gooch denominated spurious hydrocephalus. These physicians thought that it was not accompanied by any pathological changes, but late observers have

shown that this is not really the case. Its occurrence is noted by the drowsiness of the child, the rolling of the head about, and the depression of the anterior fontanelle, the latter being an important point in the diagnosis between this condition and meningitis. It is characterized by passive congestion, capillary and venous, and also of the sinuses, and transudation of serum sufficient to make up for the wasting of the brain. When the cranial cavity is opened at the autopsy, one or two ounces of this serum sometimes escapes. Spurious meningitis is a better name than spurious hydrocephalus for this hydrocephaloid disease in connection with enterocolitis; and it is rarely or never met with except when associated with, or resulting from the latter affection.

Another complication not unfrequently seen is congestion of the posterior portions of the lungs. Where the child's strength has become greatly reduced, the heart also grows feeble, and, in consequence, hypostatic congestion results in the lungs. As such patients usually lie on the back, the posterior part of the lungs is the most dependent, and this hyperæmia, extending for a depth of almost half an inch, is seen at the autopsy all over the posterior portion of both lungs. It is this, doubtless, which gives rise to the dry, hacking cough met with in a large number of such children. If the patient survives long enough, hypostatic pneumonia is apt to ensue, and this is frequently noticed in post-mortem examinations. In such instances it is sometimes possible to inflate the lungs, and sometimes it is not. The above are the most important anatomical characters of enterocolitis.

The symptoms of the disease are sufficiently familiar to all. In the majority of cases it begins very gradually, and the mother is exceedingly apt to attribute the looseness of the bowels to dentition. The child may have six, eight, or ten passages a day, and yet nothing whatever is done to check the diarrhœa, because it is supposed to be salutary during dentition. Dr. Smith said that even physicians formerly coincided in this opinion; but he himself believed that dentition had very little to do with the causation of summer diarrhœa. Indeed, the younger the child, the more apt it is to be attacked; so that infants are more likely to have the disease before dentition than they are after this has commenced.

Vomiting in such cases is not one of the initial symptoms, but sometimes it is, as when, for instance, the attack is directly attributable to some indigestible article of food. In such a case there is both vomiting and purging from the commencement. Ordinarily, however, there is gradually increasing diarrhœa for one or two weeks, and then vomiting also sets in. The most severe form of the disease is that known as cholera infantum, which resembles Asiatic

cholera very markedly in its symptoms, but has, of course, no connection with that affection. Cholera infantum is to be regarded as simply an aggravated form of enterocolitis, because it is undoubtedly inflammatory in its nature. To look at or feel the skin of a child suffering from it, one could scarcely think that there was much fever present, and yet the thermometer in such cases almost always shows a temperature of 105, 106, or even 107 degrees. Cases of cholera infantum frequently run on into ordinary enterocolitis, when the urgent symptoms are relieved, and so, on the other hand, cases of ordinary enterocolitis are sometimes changed to cholera infantum, in consequence of some imprudence of diet or other source of aggravation.

The stools vary greatly in character, sometimes being yellowish, sometimes brown, and sometimes green; and there is one point of interest in connection with the green color frequently observed. Formerly it was supposed that this resulted from the liver being at fault, and calomel was almost always administered freely in consequence. Dr. Smith states that for years he had not given a particle of calomel in such cases, though sometimes he met in consultation physicians who thought it indicated from the vitiated condition of the bile, as they inferred simply from the green-colored stool. In order to determine this matter satisfactorily, Dr. Smith some time ago made a special examination of the liver in thirty or forty cases where death resulted from enterocolitis, and not in a single one of them could anything abnormal be detected about it, either with the microscope or otherwise. Moreover, he never observed this green discoloration at the point where the bile is poured out into the intestine (as would naturally be expected if it were due to the action of the latter); nor did it make its appearance until he got down to the ileum, several feet below that point. He concluded, therefore, that the bile had nothing to do with the green color observed. It is well known, also, that the stools may present a yellowish appearance when passed, but become green on standing, and especially if in contact with urine. The green color seems in reality to be due (as, indeed, is now generally accepted) simply to acidity. It is a fact that the kidneys are more apt to be affected in enterocolitis than the liver; and Dr. Smith thought it highly probable that the persistent vomiting in some cases was attributable to uræmia, in consequence of trouble in the kidneys.

Dr. Smith now proceeds to take up the subject of treatment, which, he said, was one of the greatest importance to every general practitioner. He believed that there were but very few remedies from which it was necessary to select, and for his own part he scarcely ever employed more than two, viz.: opium and bismuth, before the hydrocephaloid stage was

reached, and these he considered better than all others. The administration of the large doses of bismuth now employed is of but recent origin, but has been followed by the best results. In ordinary cases it should be given in doses of ten or twelve grains, and it may be advantageously combined with the compound powder of chalk with opium (which contains one grain of opium in forty), or else with ordinary Dover's powder. For general use, however, it is perhaps better to give the bismuth in suspension, and the following prescription will be found a very admirable one:

R. Tinct. opii decoloratæ, ....gtt. xvj.  
Bismuth. subnitratis, ..... 3 ij.  
Syrupi, ..... f 3 ss.  
Aquæ, ..... f 3 iss. M.

Dose, a teaspoonful for a child of one year.

Dr. Smith said that he had been much more successful since he had employed opium and bismuth in this way than before, when he would often try a long list of remedies in succession, and not find good results from any. Such a combination as the above is retained on the stomach, and has the effect of both an antiseptic and an astringent. No preparatory treatment is necessary, unless it is found that some irritating article of food has been taken; but most of the cases are considerably advanced when the physician is called in, and any such source of trouble has long since been gotten rid of.

Almost all cases of enterocolitis need stimulus, and brandy is the best form in which it can be given. Of course, the amount should vary according to the age, and Dr. Smith is in the habit of giving three drops for every month of the child's age (when under one year) every two or three hours.

When the hydrocephaloid stage of the disease is reached, the opium should be withdrawn or given very cautiously; but the bismuth may be continued as before. At this period, however, we must depend principally on tonics and astringents, and one of the most useful agents that can be employed is the liquor ferri nitratis. The following prescription will prove of great service:

R. Tinct. calumbæ, ..... f 3 ij.  
Liq. ferri nitratis, ..... gtt. xvij.  
Syrupi, ..... f 3 ij. M.

Dose, a teaspoonful.

At the same time the stimulus should be kept up as before.

Finally, the kind of diet used is of the utmost importance. If the child is under one year old, it should at once be removed to the country, or a wet-nurse should be provided for it, as no artificial food is reliable. If both of these are impossible, the best cow's milk should be prepared in such a way as to resemble healthy human milk as much as possible. The milk



should be allowed to stand for some time, and then only the upper third of it employed. In this way the larger part of the sugar and butter will be obtained, while the indigestible casein (which settles to the bottom) will be avoided. As regards farinaceous preparations for children under six months old, Dr. Smith prefers Mellin's Liebig's food, which also has the endorsement of such authorities as Eustace Smith and Tanner. Its taste is quite sweet from the dextrine and glucose which it contains, while it is almost entirely free from starch. When added to cow's milk, it makes as good a substitute for mother's milk as has as yet been obtained. After the age of six months infants can digest a certain amount of starchy food, and then Robinson's prepared barley may be used with advantage, if it is sufficiently boiled. As a rule, however, Dr. Smith prefers Ridge's food, which is highly recommended by Steiner, of Germany. Dr. Smith formerly used to employ Nestle's food, but has been obliged to give it up, when the bowels are affected, on account of its laxative effect. In cases of habitual constipation in young infants, which is so often a very perplexing condition to the practitioner, he has found it of very great service.

#### A BLOODLESS METHOD OF PERFORMING TRACHEOTOMY.

We all know that the statistics in favor of tracheotomy below the age of three are not very favorable, some practitioners in Germany even refusing to perform the operation in croup or diphtheria, while some of the hospitals deny admission to the patients, as it increases the mortality percentage of their operative treatment to a very great extent. Out of 504 patients on whom the operation of tracheotomy was performed in diphtheria, at Professor von Langenbeck's clinic during the last six years, 357, or 70.8 per cent., died. The causes of death were principally lobular pneumonia, croupous exudation, extending into the bronchi, asphyxia, exhaustion, paralysis of the laryngeal and pharyngeal muscles, and collapse.

The immediate danger and the sole cause of alarm to the inexperienced operator in performing the usual operation of tracheotomy is the bleeding. The operation I am about to describe, which may be considered entirely bloodless, is the one at present almost universally adopted in Germany when operating on children.

This operation of tracheotomia superior was first performed by Rose, Professor von Langenbeck's very able assistant, and is carried out in the following manner:

The little patient is slowly chloroformed, the mask being somewhat raised from the face if a paroxysm of coughing should set in. (I have constructed a chloroform-apparatus which may be regarded as an extensively modified Junker's inhaler, by which the amount of chloroform inhaled can be exactly regulated, and the whole apparatus worked with one

hand, leaving the other hand free to feel the pulse etc., and to assist the operator. This apparatus is in use at some of the Berlin hospitals.) As soon as the patient is chloroformed, a roller is thrust under the neck and the head allowed to fall backwards; this gives the front of the neck an arched appearance, and will throw the important parts into prominence. The operator now seeks the upper margin of the cricoid cartilage with the tips of his fingers, and makes a vertical incision through the skin exactly in the middle line of the neck, beginning about a small finger's width from above the upper margin of the cricoid, and extending about an inch and a half to two inches downwards. The incised parts are drawn asunder, and the cricoid cartilage is thus so far exposed that, after steadying it with a finger, a transverse incision of not quite half an inch in length can be made as near its higher margin as possible. By this incision, the fascia which envelops the thyroid gland and connects it with the trachea is divided through. With a pinæte, the operator now seizes hold of the lower border of this transverse incision, and, in the same way as the periosteum is levered off from the bone in a subperiosteal resection, he severs the fascia off from the trachea in a downward direction either with a blunt hook or a director, pushing downwards with the fascia all those veins which cause so many difficulties. As the operator gradually descends with the director, he unloosens the isthmus of the thyroid gland from the trachea, pushing the gland outwards and downwards, and lays the upper tracheal rings quite bare, so that they can now be seized and opened in the usual way.

This operation is particularly applicable to children, especially in those cases where immediate danger is apprehended and the operation is to be performed at once. It is certainly preferable to the operation of tracheotomia inferior, which is performed below the thyroid gland, where the trachea lies much deeper and is covered by an extensive plexus of veins. In the operation just described, which is made above the isthmus of the thyroid gland, the number of cartilaginous rings that can be exposed and cut into, will of course be more limited than in the inferior operation, and will also permit, should it be deemed necessary to enlarge the opening, to extend the incision upwards by dividing the cricoid cartilage, which in children none need hesitate to do.

Another great advantage in this operation is the fact that it does away with a staff of assistants. An intelligent nurse alone will be able to do all the assistance that is required. The incised parts can easily be kept asunder with a large strong hair-pin, somewhat stretched to represent a large V, the free ends bent into half-hooks, or two small hair-pins can be selected, the free ends bent and inserted under the incised parts on opposite sides, while the head of one pin is fastened to a piece of elastic, which passes round the back of the neck to the head of the other.

This operation need but be practiced once or twice to insure confidence.—Louis Henry, M. D., in *British Med. Journal*, May 25, 1878.

## A SUBSTITUTE FOR CALOMEL.

Sulphate of manganese, according to Dr. Goolden, in the *London Lancet* of June 15th, 1878, is a most excellent substitute for mercury in the various bilious troubles. In Jaundice, hepatic dropsy, and hypochondriasis it has produced most remarkable results, and in hemorrhoids and in congestion of the fauces and bronchia it is proved no less efficacious. Anæmic patients who can not take any of the preparations of iron are enabled to take iron with benefit if combined with two to five grains of sulphate of manganese. Its taste is not unlike that of epsom salts, but it is less bitter. Dr. Goolden prefers to administer the manganese in ten grains to a scruple dose, in a glass of water, adding a little citrate of magnesia to cause effervescence. By these doses large bilious dejections are produced. Half a drachm is the utmost dose ever necessary, and ten grains is usually quite sufficient. The larger doses sometimes produce decided though temporary nausea, and this may be avoided by adding a small quantity of epsom salts. Its action is attended by neither griping nor depression; neither the heart's action nor the pulse are altered.

## VOMITING IN PREGNANCY.

By A. D. FELTON, M.D.

I noticed, in a recent number of the *Record*, a résumé of an article by Dr. M. O. Jones, of Chicago, relating to the treatment of vomiting in pregnancy.

His recommendation of the local application of caustics calls to mind a case I successfully treated by that means.

Mrs. M—, a symmetrically built and healthy young woman, has been pregnant four times. Vomiting commenced in about three weeks from each conception. This unpleasant symptom continued persistently during each pregnancy, until she aborted, or was delivered at term.

Vomiting was so easily provoked and her general health so soon suffered, that she could do little more than pass the time in an easy-chair, listlessly gazing out of the window, vomiting frequently, and scarcely able to partake of half a meal a day. During one pregnancy, which terminated in abortion at three months, her case became desperate, she being confined to the bed, and vomiting about every ten minutes, except when decidedly under the influence of morphine (hypodermically.)

For two weeks all food and drink were rejected, nourishment being received by enemata.

During this time not a drop of anything was taken into her stomach, and still retching and bilious vomiting continued. She was finally relieved by the use of Saratoga water, which, of the numerous remedies tried during her several

pregnancies, was the only one that afforded any satisfaction.

Becoming pregnant the fourth time, and receiving no benefit from Saratoga water, Mrs. M. was very much depressed, declaring that she would sooner die than pass another eight months of torture; for the nausea was even more severe than at an equally early period in previous pregnancies.

Realizing the necessity of offering her some relief, and having somewhere seen local treatment suggested, I resolved to try it, even at the risk of exciting abortion. Therefore I made a very thorough application of a saturated solution of nitrate of silver to the cervix uteri.

That night her sleep was undisturbed, vomiting ceased, and did not return during the balance of gestation, except as an occasional morning sickness, which was so slight as to give little annoyance.

Indeed, her health and spirits were never better or more buoyant than during the period of gestation following the application of silver. *N. Y. Medical Record.*

## TREATMENT OF CANCER OF THE BREAST WITH SPECIAL REFERENCE TO CAUSTICS AND OPEN WOUND.

Z. H. EVANS, M. D., LODI, OHIO.

My early teaching from preceptor and professors, (men of considerable reputation among the profession of this country at least,) in regard to the treatment of cancerous disease of the breast, was to use the knife, and thus, if possible, secure union by first intention. I heartily endorse this strenuously advocated mode of treatment, provided the surgeon could always be assured of having extirpated every germ of cancerous growth, but since he can never indulge in this happy assurance, I have, for certain, to me at least, plausible reasons, departed from the generally accepted mode of treatment. As a result of my observation and experience, I am decidedly in favor of the following mode of procedure:—

First—In the original operation, whether by caustic or by knife, go fairly beyond the supposed limits of the diseased tissues. (My preference in first operations has always been in favor of the knife, the state of the patient's health permitting.)

Secondly—After the initiatory operation, I adopt free use of the super-sulphate of zinc as recommended by Prof. Tanner in his work on Practice of Medicine, for two reasons, viz: First, to arrest hemorrhage, and secondly, to destroy any remaining diseased tissues that have escaped the knife. Although I am aware that the majority of the profession endorses Velpeau when he says: "The use of caustics neither requires a knowledge of anatomy or operative surgery; yet I for one, am decidedly in favor of their employment in cancerous deposits of the breast. The arguments, as they present themselves to me, in favor of treatment by open wound are: First—In unusually large tumors, the utter impracticability of securing union by first intention, and the feasi-

bility of the removal by this method. Second—Avoidance of the pressure which is necessitated by the ordinary method of securing union.

Third—Avoidance of septicæmia by following free exit of pus.

Fourth—the opportunity afforded the surgeon of observing the degree of success attending first operation as regards the removal of cancerous material, and to remedy any defective results.

I have for the last five years adopted this method of treatment in preference to any other that I have seen advocated by our surgical authors. Have for the past five years treated twelve cases of cancer of the breast by the method here advocated, and I am yet to see or hear of a case where the disease returned.

By this evidence I am lead to believe that cancer is not at all times constitutional, and invite the attention of the profession to this method of treatment and ask them to make trial of it and report their results.—(*Toledo Medical and Surgical Journal*.)

#### LANGENBECK ON THE REMOVAL OF FOREIGN BODIES FROM THE ŒSOPHAGUS.

Some excellent hints on the extraction of foreign bodies from the pharynx and œsophagus are contained in a lecture delivered by Professor von Langenbeck before the Berlin Medical Society.

The finger, he says, should always be used to try and extract large foreign bodies before any instrument is introduced, and the latter should be reserved for those cases where the foreign body is too firmly impacted for the finger to remove it. Tracheotomy would probably always be performed too late, for large objects—such as sets of false teeth, which are among the commonest sources of of these accidents—may rapidly kill by pressing the epiglottis firmly down on the rima glottidis, and suffocating the patient. Before chloroform is administered to elderly people the surgeon should always make sure that they are not wearing false teeth.

The finger should also always be used to feel for small pointed bodies, such as needles, fish-bones, etc., which are so apt to lodge in the hollows between the glosso-epiglottic ligaments,

Large bodies, like lumps of meat, potatoes, etc., not unfrequently lodge in the œsophagus at the level of the cricoid cartilage, and may give rise to great dyspnoea by pressure on the larynx or trachea. They can readily be detected at times by a globular prominence on the left side of the neck, but are often difficult to extract owing to spasmodic contraction of the œsophagus above and below them.

In two cases of this kind, Professor von Langenbeck succeeded, by squeezing the mass between his fingers, in altering its shape, so that in one case it was readily extracted by the forceps, and in the other it passed down into the stomach.

If the body cannot be felt in the neck, we must not trust to the patient's statements as to its position, for they are generally wrong, but must examine the œsophagus with an instrument from within.

Von Langenbeck strongly condemns the use of a whalebone bougie armed with a sponge for this purpose, as recommended in many German works on surgery, for it is impossible to feel with it, and hence to discover the position and the consistence of the foreign body; and the latter is frequently pushed deeper down, and rendered impossible to move; or it may even, as has actually happened, be forced through the wall of the œsophagus into the posterior mediastinum. The use of such an instrument must be restricted to the removal of soft bodies which may be pushed down into the stomach (if need be) without doing harm. Professor Langenbeck himself invariably uses a polished iron ball, fixed to the end of a whalebone rod, for catheterising the gullet. If well oiled, this instrument enters easily, can be easily moved about during exploration, and with it hard bodies, such as coins, needles and bits of bone can be detected with certainty.

Where he simply wishes to try and force a soft object into the stomach, von Langenbeck prefers a gum-elastic œsophageal bougie. It enters with great ease and no harm can be done with it.

Foreign bodies, which may become dangerous by wounding the œsophagus or by impaction in the bowel, should always be extracted by the mouth if possible. Under this head fall pieces of bone, splinters of glass, coins, needles, and fish-bones. Professor von Langenbeck has performed a large number of such operations without a single accident. He invariably uses von Graef's "coin-catcher," an instrument which, all things considered, leaves nothing to be desired.

There is an additional reason for promptly extracting foreign bodies from the œsophagus—namely, that if allowed to remain they may become a source of serious danger to the patient. Adelman collected 314 such cases, and among these there were 109 deaths. Of course there are numbers of cases where the foreign body is either successfully extracted or else pushed onwards into the stomach, which are never published.

If everything else fails, and the cervical portion of the gullet is implicated, œsophagotomy must be performed. This operation is comparatively rare; up to 1872 it had only been done twenty-six times for the removal of foreign bodies. Von Langenbeck gives the details of two later cases of his own in the lecture before us, and points out that since there were in these twenty-eight cases twenty-three recoveries and five deaths, œsophagotomy must not be regarded as a very dangerous operation. He describes the details of the operation, which closely resemble the account given in English works—for instance, in Bryant's Surgery. One or two points only deserve notice in von Langenbeck's description. To render the œsophagus prominent before incision, he recommends a strong gum-elastic œsophageal bougie or a flexible pewter sound to be introduced, provided the prominence of the impacted foreign body is not sufficiently marked. One condition may be met with during the operation which may make it extremely difficult to perform—namely, swelling

of the thyroid gland from venous stasis. This condition, which Professor von Langenbeck mentions, owing to his not having found it described elsewhere, is always present if a large body has been impacted for several days at the level of the cricoid cartilage, and has caused dyspnoea by its pressure on the larynx. The swollen gland spreads out over the œsophagus so as to completely cover it, and it is necessary to divide the fascia enclosing the gland, so that the latter may be drawn away from the œsophagus.

Lastly, the Professor warns surgeons not to force their way inwards in an operation like the above with the finger or with blunt instruments, for fear of injuring vessels or delicate nerves. "The nearer an operation has to be performed to important organs, the more closely must our manipulation resemble the finest anatomical dissection, and operators cannot be too strongly warned not to tear the tissues in the manner just described."—(*Medical Times and Gazette*.)

#### DIARRHŒA FROM IMPACTION OF THE RECTUM.

Diarrhœa is so very commonly regarded as a malady to be checked that the following case may be found instructive. I had it from a surgeon of eminence for diseases of the rectum. He was consulted by a lady who was much troubled with her bowels. When dressing she would have to comply with the demand upon her rectum, after breakfast she would have to retire, and so on five or six times every day. She had been treated most elaborately for diarrhœa, and the surgeon informed me that he had retained a prescription given to the lady by one of the most eminent physicians in London, under whose care she had been for some time. Previous to that she had been actively treated by her doctor in the country, who in despair had sent her up to town. As she got no better for the orthodox chalk, catechu and opium mixture of the physician, she was prevailed upon to consult this rectal surgeon. He found that she had great tenesmus, and that after her repeated visits to the closet during the whole day she only passed about an egg-cup full of thin fluid fœces, without mucus or blood. On making an examination by the rectum, a solid fecal mass was found upon which the finger could make no impression, so dense was its consistence. This at once explained the persisting desire to go to stool, and also the other fact of the liquid fœces, for nothing but a fluid could pass the obstruction at the outlet of the gut. The lady was put under chloroform, the anus was dilated, and she was delivered, —for delivery it amounted to,—by means of a pair of short midwifery forceps, of a mass of solid fœces in shape and form like a five inch bologna sausage. It was of a clay-like consistence, and consisted of the bran of wheat meal, matted together with vegetable fibres, and containing a quantity of mucus corpuscles infiltrated with lime salts. The patient at once lost her distressing tenesmus and had no further necessity for the diarrhœa mixture. She had for a long time eaten bread of whole wheat meal for

the purpose of keeping the bowels open, and from this were derived the bran scales of the fecal mass. The case is a very instructive one, illustrating as it does how even a physician of eminence may misinterpret a series of phenomena when under the influence of a strong preconception as to the nature of a malady.—(J. Milner Fothergill's London letter to the *Philadelphia Medical Times*, March 16, 1878.)

#### TREATMENT OF CYSTITIS IN THE FEMALE.

Dr. William Goodell, in an interesting clinical lecture on this affection (*Medical Record*), calls attention to its great frequency. It is commonly the result of anteversion or retroversion of the uterus, the pressure of a tumor, tedious labor or a forceps case. It is hard to treat cystitis successfully. Great relief may be given by a vaginal suppository of 1 gr. of opium and 1 gr. of belladonna, night and morning, or a rectal suppository of 1 gr. of the watery extract of opium with very light diet. If acid urine sustains the cystitis, ten to fifteen minims of liquor potassæ should be given thrice daily in milk. The same quantity of tinct. belladonna should be given with the potassa. If these plans fail, a five ounce solution containing two or three grains of morphia should be injected into the bladder and retained for a short time. Sometimes cystitis is kept up by a small fissure or ulcer in the urethra at its junction with the bladder; dilatation is the great remedy in such cases, and is followed by a signal success, the uterine dilator may be passed into the urethra and expanded until the urethra is so enlarged as to admit the tip of the little finger. The ordinary uterine forceps can be used for this purpose. Dr. G. has performed this operation on patients three months pregnant, without any other than good results.

#### TREATMENT OF POST-PARTUM HEMORRHAGE.

Prof. R. A. F. Penrose, M. D., in a lecture delivered before his class in the University of Pennsylvania (*Boston Medical and Surgical Journal*), calls attention to a sign of this accident which he regards as almost pathognomonic, namely, *dreadful gaping*. When this is observed in a woman just delivered, "something serious is the matter." The treatment should be preventative and curative. Saline purgatives and diuretics for plethoric women, and iron, bitters, stimulants and good food for the anemic. Aid nature with the forceps, if labor is tedious; and retard delivery with chloroform, if tendency to be too rapid. As soon as the child is delivered, secure the expulsion of the placenta by means of a large dose of ergot and by external compression.

If bleeding continues after the expulsion of the placenta, a drachm of the fl. ext. of ergot should be given every fifteen minutes,—if the stomach is intolerant, give it hypodermically. Then one hand should be passed into the uterine cavity while the other compresses externally. If this does not suc-

ceed, carry a piece of ice, the size of a walnut, up into the uterine cavity. But, suppose the bleeding continues? You are not at the end of your rope, neither is there any necessity for you injecting alcohol, turpentine and per salts of iron into the uterus as has been advised by some obstetricians. You might on the same principle insert an ivory speculum into the vagina and through it apply a red-hot poker to the cavity of the womb, the immediate results of which would be most admirable. The womb would contract of course, but the patient would be killed. But call for a cup of vinegar, dip a handkerchief into it, and, carrying it up into the uterus, "squeeze it out there." This remedy has never failed. If no vinegar is to be had, peel a lemon, cut gashes into it and carry it into the womb and squeeze it. Another resource is efficient pressure on the ascending vena cava, and descending aorta; this, combined with a large dose of opium (50 gtt. tinct.) to invigorate the nerve centres, will often succeed at this stage. As a diet, animal broth with plenty of salt is indicated during convalescence.

#### ABORTION, ITS SYMPTOMS AND TREATMENT.

R. A. F. Penrose, M.D. (*Medical Record*, December, 29, 1877):—"The great accident of pregnancy is abortion." The expulsion of the product of conception from the uterus before the seventh month constitutes abortion. "The escape of the ovum before the twentieth day constitutes an affluxion." According to recent statistics 37 out of every 100 women abort at least once before reaching the age of 30 years, and it may safely be said that 90 per cent of married women abort at some period of their lives. The fact that 106 boys are born at full term, against 100 girls, would seem to indicate that abortion is easier in the case of female children than in that of male children. Abortion may be of three kinds, spontaneous, accidental and designed.

The causes of spontaneous abortion may be divided into three classes:

I. Those resulting from the constitutional peculiarities of father and mother.

II. Those resulting from the condition of the uterus and its appendages.

III. Those resulting from a diseased condition of the ovum. Among the constitutional causes may be mentioned plethory, and its opposite, anæmia, the nervous temperament, and constitutional syphilis, and debauched old age also. A man who has once had constitutional syphilis should never marry.

Under the second class these conditions which interfere with the development of the ovum are mentioned as most important, viz.: displacements, inflammatory affections of the uterus and its linings, tumors, diseases of the rectum, bladder and ovaries.

Periodic abortions are due to menstrual congestion of the mucous membrane, a diseased state of the uterus, or some abnormal organic

condition. Retroversion of the uterus and chronic endometritis cause the abortion of the impregnated ovum early, if not always, at least very frequently, where those troubles exist.

The most common causes of abortion are those that are found in the ovum itself. "Almost all the diseases which occur after birth may be present also in uterine life;" inflammations, dropsies, diseases of liver and kidneys, tuberculosis, stranglings, twistings and knots of the cord. Small-pox may be developed in the fetus, while the mother shows no signs of the disease. The great majority of fetal intra-uterine diseases are the results of constitutional syphilis in the parents. Also, the placenta may have hydatid disease of the villi, there may be alteration of the amnion, and even fatty degeneration of the placenta itself. It is the opinion of Dr. Barnes that fatty degeneration of the placenta is caused by syphilitic infection, resulting in an imperfect formative force in the ovum.

Accidental abortion is very likely to occur at the menstrual period, and may be caused by a violent fall, sudden fright, great grief, etc. Also, it may be produced by a distant irritation, as an irritated nipple.

There are many other causes that are sure to produce accidental abortion, among which may be mentioned the careless use of the uterine sound.

The two main symptoms of abortion are pain and hemorrhage.

The positive diagnosis of abortion can only be made by the discovery of the ovum in the discharges, or elsewhere. The discharges should all be saved for the inspection of the physician.

The prognosis is generally more favorable in spontaneous than in accidental abortion, for in accidental abortion the hemorrhage may be so rapid and profuse as to suddenly kill the patient. In a majority of criminal abortions hemorrhage kills the victim. Abortion produced by small-pox, scarlatina, dysentery, or pneumonia is exceedingly fatal to the mother. Abortion during the course of the disease small-pox, is much more fatal than during convalescence from the same disease.

The treatment of abortion may be said to be both preventive and curative. The preventive treatment includes all the means used to prevent the repetition of abortion. Plethora, anæmia, or nervous irritability should be modified or removed. Syphilis should receive proper treatment. Local disorders, such as chronic metritis, hypertrophy, prolapse, retroflexion, or erosion of the uterus should be treated to remove the disorders. If a syphilitic mother become pregnant she should be subjected to mercurial treatment. If the ovum is already diseased it will be impossible to avert an abortion, and it will be better to allow nature its own course in such a case.



## TREATMENT OF PITYRIASIS CAPITIS AND OF ALOPECIA.

Malassez (*Journal de Médecine*) Dec., 1877.

The facts placed beyond doubt by Malassez in regard to this affection, are, first the constant existence and very great abundance of a certain species of fungus, and, second, the absence of this fungus, or at least its great rarity where there is no pityriasis, or where it no longer exists, as well as in other squamous affections, such as eczema, psoriasis, and ichthyosis. This fungus consists solely of spores. They are found in the corneous layer of the epidermis, where they form horizontal layers or veritable heaps between the diverse layers of this horny portion. At the same time a vesicular alteration of the epidermic cells, already described by Ranvier, is proven.

M. Malassez concludes from these facts, that pityriasis results from the invasion of the hairy scalp by this fungus. 1st. Arriving upon a soil favorable to their development (arthritic subjects) the spores multiply, infiltrate themselves into the corneous layer of the epidermis, and there separate into layers. 2nd. This invasion produces in the tissues an irritation, a reaction which manifests itself by the vesicular state of the epidermis cells, a new cause of desquamation.

From this double cause, then, external and internal, and from the double mechanism, direct and indirect action, result important practical conclusions as regards treatment. This should be local and general. The local treatment alone will occupy us at present; it should be essentially antiparasitic, and it is necessary in applying it not to lose sight of the nature and seat of the parasite. Being a fungus, the parasite may be destroyed by such agents as turpeth mineral, sublimate, &c. The parasite being situated in the corneous layers of the epidermic layers, which are all impregnated with fatty matters, it is necessary to make the parasiticide penetrate them. The following treatment carried out carefully, succeeds perfectly:

1st. Every second day combing with a fine comb, and soaping the head with common soap. This removes mechanically the scurf, and removes the fatty matters from the hair, and opens up the retreats of the fungus to the action of the parasiticide. With long-haired persons this is not practicable. Men and children should have their hair cut closely. As we cannot usually ask women and young girls to make a sacrifice of their long hair, frictions with commercial alcohol should take the place of the soaping.

2nd. When the hair is well-dried, friction should be made to the scalp with an ointment composed of equal parts of cocoa, butter, castor oil, and oil of sweet almonds, containing one part of turpeth mineral to fifteen of the exci-

pient. Only small quantities should be made at a time, as it soon becomes rancid. In place of this, benzoated lard may be employed as the excipient, though the author prefers the vegetable fats mentioned. Great care should be used in applying the ointment so as to reach every spot of the scalp, and it should be well rubbed in. Large quantities should be used, and frictions made every day. After a week or two of treatment, combing and cleansing of the scalp may be made less frequently, say twice a week, and later but once a week. The ointment may also be applied but two or three times a week, though it is well to continue its use for some time. Amelioration comes soon, complete cure less so, and requires considerable persistence in treatment.

For pityriasis of the beard the ointment would be inconvenient, and may be replaced by alcoholic solutions of corrosive sublimate, one part to 500 or 1,000, according to circumstances. A small brush (a soft tooth brush is useful) is saturated with this solution, and rubbed into a small portion of the affected skin at a time, then wet again and applied to a new spot. After all is done, wait a few moments and then wipe off any excess of liquid on the beard.

The combs and brushes used should be frequently cleaned with potash, or they will become new sources of contagion.

The alopecia, which succeeds pityriasis, results from the formation of an epidermic plug in the upper portion of the hair follicle, this being an obstacle to the normal exit of the hair. Irritation follows in the deeper portion of the follicle, then hypertrophy of the walls, and finally, obliteration of the hair follicle. After a time, only a fibrous cord is left in its place. Treatment at this stage is of course useless. But during the developmental stage one may hope to arrest the disease, and even to make the hairs more vigorous:

1st. By unplugging the orifices of the hair follicles. 2nd. By curing the pityriasis, which affects the superficial regions. 3rd. By counteracting the irritation in the deeper parts. For the last condition we may add to the turpeth mineral ointment, from two to four parts of tincture of cantharidis to thirty of the ointment. As the required effect is produced slowly, the cantharidis should be continued long after the pityriasis has disappeared. A weaker ointment should then be used without the turpeth mineral, or but very little of it, say half a part to one part of the mineral and thirty of the excipient, the cantharidis remaining the same. Gallic acid ointment is also useful in these cases. The patient should be informed that friction will at first cause an increased fall of the hair, but it is only temporary, and the diseased and loosened hairs will be replaced by more vigorous ones.

# THE CANADA MEDICAL RECORD

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## TO OUR SUBSCRIBERS.

By looking at the address on the wrapper around the RECORD, each subscriber can see the date to which his subscription is paid. In addition to this we sent accounts to all in the June number. We specially ask a prompt remittance.

## VICTORIA MEDICAL COLLEGE AND LAVAL UNIVERSITY.

Just as we are going to press we learn that the difficulties which have occurred between the late Medical Faculty of Victoria College, which was bodily transferred and became the Medical Faculty of the branch which Laval University intended to open in Montreal this fall, have ended in an open rupture. The opinion we expressed in our last issue that *L'Ecole de Médecine et Chirurgie de Montréal*, (Victoria Faculty) might yet be numbered among our Medical Schools, seems about to be realized, for the secretary of that Faculty has announced in *La Minerve* of the 25th July, that Victoria Medical School will open as usual on the 1st of October next. The cause of the difficulties are doubtless many, but chief among them is the fact, that in the new position which they accepted, they found themselves powerless as a body, the real director of the Faculty being the Rector of Laval University. To this they objected, and finding they were still secure in the Hospital privileges at the *Hotel Dieu*, and that they were backed by strong support, they have cut themselves adrift from their new love, and gone back to the old. We presume they would not have taken this course, were they not assured of being received, if not like the Prodigal son, at all events, with cool indifference. We confess that the whole proceedings connected with this double transfer of allegiance from one University to another and back again, does not strike us as being of the most exalted character, and that as it at present appears, Victoria College has simply allowed herself to be made a convenience of. We do not consider this position a very dignified one for a University to occupy.

## THE CITY OF MONTREAL.

"Cheap and nasty," if not a proverb, is at least an axiom familiar to most ears. A couple of years ago—times being bad in the city of Montreal, as indeed they are and have been everywhere—a gentleman came forward, and with the retrenchment cry on his lips was elected Mayor of the city. We do not say that to this cry alone was to be attributed the fact of his election, but it had much to do with it. That gentleman was the present Mayor of Montreal, Mayor Beaudry. He has now occupied the Civic chair for nearly two years, and we do not hesitate to say, that in our opinion he has been the most expensive Civic Magistrate which Montreal has known for years, perhaps ever known. In making this assertion we are not alluding to his conduct in connection with recent disturbances in our midst. As scientific journalists, that is beyond our province. It is his unfortunate attempts to balk every sanitary legislation by the Council—that should cause Montreal to dispense with his service at the earliest possible moment. It is utterly impossible to compute the grave injury which he has done to our city. We care not to estimate the valuable lives which have been sacrificed for the want of an active Sanitary Board, the non-existence of which is largely due to him but, outside of all this, he has done the city a grave commercial injury. We seldom open a Medical Journal published on this Continent without finding our city alluded to in terms which cannot but indirectly cause a very large number of summer tourists to pass us by. Medical men are the readers of these journals, they are continually consulted as to the route of travel, and we know that the unfortunate reputation which our city has obtained has very largely interfered with the intentions of many to pay us a visit. Sanitary legislation is now one of the most prominent topics which engages the attention of all enlightened legislators. Mayor Beaudry seems incapable of rising to the level of such topics, he cannot grasp them, and his ridiculous remarks when sanitary matters are up for discussion cause many to hang their heads with shame, to think that the chief commercial centre of the Dominion has such a man for its Mayor. The axiom with which we commence this article may with truth be applied to him. Our contemporary the *L'Union Médicale* thus writes on the

same subject in its last number. After alluding to the vote by which the city refused to name a Board of Health, it then says:—"The detailed vote which gave such honor to a city of 134,000 population was as follows:—Ald. McCord proposed the nomination of a Board of Health. The vote was:—Alds. Hagar, Childs, McCord, Holland, Grenier.—6. Against: Jeannotte, Melançon, Thibault, Laurent, Kennedy, Robert, Wilson, Donovan.—8. Of these eight, two represent St. Mary's Ward, which gave the largest death rate in 1877, actually 20 per cent. of the total mortality. Ald. Robert represents St. James' Ward, with a death rate next to Mary's; Donovan and Kennedy, St. Ann's Ward, fourth on the list. Can these gentlemen explain this vote? True it is that it is unnecessary to understand the laws of hygiene to be an alderman or a member of the Board of Health, but it proves that the most elementary principles of political economy would suggest another decision, and we are not certain that the last public money would be better spent than by protecting the health of the city. Spread the news of this vote to the world of tourists, and we would find few to turn their steps in this direction. For these and other reasons is it not necessary for us to do all in our power to ameliorate the sanitary condition of the city? The position of the city of Montreal is very advantageous, and yet our death rate is 30 per cent. higher than that of Chicago, and 24 per cent. higher than New York, but in these great centres you will not find eight aldermen to vote like ours, and there they have good Boards of Health. The reason that the Board is not in favor is said to be the small results returned and the defectiveness of its usual reports, but still it has effected a vast amount of good, and could certainly be made much more effective. Commence then to put in force the several by-laws necessary, which are now dead letters; give the office the necessary money and authority, and we shall soon experience practical results, which will amply repay the city for its outlay. Our citizens ought not to be kept in ignorance of hygiene principles by the few who care nothing for the prosperity of the city, which is as great from a sanitary as a commercial point of view."

#### MEDICAL COLLEGE CALENDARS.

We have received the annual announcements for the coming season of McGill and Bishop's University, Montreal. Our McGill friends have improved their Calendar considerably this year, but that of Bishop's University still bears off the palm of being the neatest and best arranged Medical College Calendar issued in Canada.

#### COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

We direct attention to the advertisement of this College, intimating that the Annual Subscription is due. The importance of paying this subscription will be understood when we say that no one in arrears for it can commence an action in a Court of Law to recover a bill for professional service.

#### COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.

The next Matriculation Examination of the College of Physicians and Surgeons of Ontario will take place in the Collegiate Institute, Kingston, on Tuesday and Wednesday, the 20th and 21st August, 1878.

#### PERSONAL.

Dr. Gravely (M.D., Bishop's University, 1876,) has settled in Cornwall, and is establishing himself in an excellent practice.

Dr. Hayes (M.D., Bishop's University, 1876,) sailed for Europe in medical charge of the S.S. "Ontario," of the Dominion Line, on the 20th July.

Dr. Brodie (M.D., McGill College, 1876,) has been appointed Assistant Demonstrator of Anatomy in the Medical Faculty of Bishop's University.

Dr. Kerry (M.D., Bishop's University, 1878,) has been appointed Curator of the Museum in the Medical Faculty of Bishop's University.

Dr. Shee (M.D., Bishop's University, 1874,) has removed from Inverness, Megantic, to St. Sylvestre, Que.

Dr. Sheridan (M.D., Bishop's University, 1878,) has commenced practice in Montreal.

## DR. BROWN-SÉQUARD.

The eminent physiologist, Dr. Brown-Séquard, has been selected as the successor of Claude Bernard in the professorship of the College of France. The qualifications of Dr. Brown-Séquard for the vacant office are beyond question, and his appointment will be hailed as a graceful recognition of scientific work not yet adequately appreciated.

THE *London Lancet* for May, 1878, contains an interesting communication from Dr. M. O. Jones, of Chicago, on the treatment of the vomiting of pregnancy, to which is added a note of a case by Dr. Marion Sims, who considers Dr. Jones' method of treatment important and worthy of more extended trial. It consists in pencilling the os uteri with the solid nitrate of silver. Usually but one application has been found to be necessary, and the gratifying relief which followed was obtained within twenty-four hours after the application.

Dr. Jones is to be congratulated on having his procedure introduced to the profession with such high endorsement.

## PERIOD OF INCUBATION OF SCARLET FEVER.

*London Lancet*: Dr. Murchison, at a late meeting of the Clinical Society, stated that authorities upon the incubation-period of scarlet fever give a range varying from twenty-four hours to a month; but the results of his own experience, extending over a period of twenty years, had persuaded him that the shorter period was nearer the truth than the longer. His paper contains details of seventy-five cases, and the general conclusions arrived at upon the data they afford was that the duration of the incubation-period of scarlet fever may be but a few hours (in one case it was certainly only eighteen hours), that it seldom exceeds forty-eight hours, and very rarely reaches as much as seven days. From which it follows that, if a person who has been exposed to the scarlet-fever poison does not take the fever after a week's quarantine, he is practically safe from infection. Dr. Murchison added that he had always acted upon this rule, and had never found it to fail.

## A SPECIFIC FOR DIPHtherIA.

Dr. Chapman, of Brooklyn, New York, claims alcohol as a specific for diphtheria, reducing the

death-rate from eighty-seven to the hundred cases to less than four. He combines with alcohol (in the form of whisky) quinine, though the latter is not essential. He claims great success, and says he has never heard of but one drunkard having the disease; and states further that alcohol so administered has none of the intoxicating effects seen when given to persons in health. He considers alcohol as an antidote to the diphtheritic poison.

*Early Puberty*—  
EXTRAORDINARY PRECOCITY.

Dr. Horatio Yates, of Kingston, Canada, reports the following in the *London Lancet*: "The child, a female, is two years and three months old. I was consulted by the mother, who supposed it had some mammary disease, there being a symmetrical enlargement of both glands. Struck by their appearance, I had the child stripped, and found what appeared to be a fully-developed woman! Abundance of hair on the pubes and in the axillæ. The genital organs, as well as the mammæ above mentioned, seemed to be fully developed. For the last three months the child had menstruated regularly three days every four weeks. She was flushed, and complained of headache and pain in the back and thighs while menstruating. She weighed forty-eight pounds."

ONE HUNDRED AND FOUR DEAD DOCTORS, AND  
NEARLY FIVE HUNDRED SICK.

A late number of the *Russian Medical Gazette* gives the following telegram from San Stefano: "Fifty physicians and fifty-four assistant-surgeons have died in the service of the Army of the Danube, thirty-one physicians are on leave, and one hundred and fourteen physicians and three hundred and sixty assistant-surgeons are ill."

## CHLORAL IN RETENTION OF URINE.

Tidd (*Gazette Méd. de Roma* and *La France Médicale*) publishes a case in which catheterism having failed in consequence of the patient being pregnant, and no urine having passed for twenty-four hours, two doses of ten grains, one half an hour after the other, produced profound sleep and involuntary passage of an enormous quantity of urine.—*London Doctor*.

## BIRTH.

In Montreal, on the 28th May, at 339 St. Antoine street, the wife of Thomas Edward Hayes, M.D., of a son.

## Pharmaceutical Department.

A. H. KOLLMYER, M.A., M.D., Editor.

### EIGHTH ANNUAL REPORT OF THE PHARMACEUTICAL ASSOCIATION OF THE PROVINCE OF QUEBEC.

The Eighth Annual Meeting of the "Pharmaceutical Association of the Province of Quebec" was held in the Rooms of Laval University, Quebec, on Tuesday, June 11th, 1878—Mr. Edmond Giroux, President, in the Chair.

Before entering on the business of the Meeting, the Minutes of the previous Annual Meeting, held in Montreal, June 11th, 1877, were read by Mr. E. Muir, Registrar and Secretary, and duly confirmed, after which the President delivered a short and interesting address. At its conclusion, the Secretary read the Annual Report of the proceedings of the Council for the past year, and Mr. J. Kerry, Treasurer, presented the Financial Statement, duly audited.

### EIGHTH ANNUAL REPORT OF THE COUNCIL OF THE PHARMACEUTICAL ASSOCIATION OF THE PROVINCE OF QUEBEC.

The Council of the "Pharmaceutical Association of the Province of Quebec" have much pleasure in presenting to its Members the Report of the Proceedings of the past year, and Financial Statement to April 30th, 1878.

There have been five Regular and two Special Meetings of the Council, and two meetings of the Board of Examiners during the year. The first of these meetings was held in Quebec on the 19th of June last, at which the following officers were elected, namely: Edmond Giroux, President; Alex. Manson, 1st Vice-President; Roderick McLeod, 2nd Vice-President; John Kerry, Treasurer; and Ebenezer Muir, Registrar and Secretary; also the following gentlemen as the Board of Examiners: H. R. Gray, N. Mercer, R. McLeod, J. B. Martel, H. F. Jackson, A. Manson, and J. D. L. Ambrose.

The Council regret to report that a vacancy occurred in their body by the lamented death, by drowning, of Mr. James Goulden, who had been a member of the Council of the Association since its formation. Mr. W. A. Dyer was unanimously elected to fill the vacancy.

It was suggested in the Report of last year, that the then incoming Council should consider the question of obtaining amendments to the Pharmacy Act. Acting under this suggestion, your Council have had at several of its meetings, this question before them, and, after due consideration, deemed it expedient that the matter should be deferred until another session. They would, however, recommend that the new Council should take the necessary steps to secure the amendments required at the next session of the Legislature. Several points for amendment to the Act have been suggested; among others the following: "Power to compel physicians to take out a license under the Act"; "To prevent county

storekeepers and grocers selling drugs and medicines"; "To regulate the position of Apprentices, and prevent them occupying positions of responsibility in Drug Stores"; "To compel licentiates keeping Branch Stores to place them in charge of a duly qualified "Licentiate in Pharmacy"; and "to make proper provision (in case of the death of a Licentiate) for the carrying on of his business under certain restrictions". These few points your Council would recommend the new Council to take into their careful consideration.

Your Council are happy to state there have been no cases of infringement of the Act, which in their opinion rendered it necessary to take legal action.

Your Council would draw attention to the fact that the College of Physicians and Surgeons of the Province of Quebec, as re-constructed by an Act of Parliament passed during the Session of 1875-76, have repealed all clauses of their former Act relating to Pharmacy; showing conclusively that they recognize the Pharmaceutical Association as the Legal Licensing body of this Province.

It has been deemed advisable that additions should be made to the Schedule of Poisons; for this purpose a Committee was appointed to draft a list of additions, for submission to the Council, this Committee has not yet reported, and your Council would recommend that action be taken in this matter by the incoming Council. A request was made in the report of last year that the Members should send to the Registrar any written suggestions they might have to make on points for consideration, as amendments to the Act; your Council regret to say that very few responses to this request have been received.

The Board of Examiners, under the direction of the Council held examinations in Laval University, Quebec, in June last, at which three candidates for the Major, four for the Minor, and four for the Preliminary Examinations presented themselves. Of these, two for the Minor and two for the Preliminary Examinations were referred back for further study.

The regular Annual Examinations were held in Montreal on the 25th and 26th of April last, at which meeting eight applicants for Major, thirteen for the Minor, and one for the Preliminary Examinations presented themselves. Of these seven of the Major and eleven of the Minor passed and received their Certificates; one of the Major and two of the Minor Candidates failed to receive the required number of marks, and were therefore referred back for further study.

The Registrar reports on the Register for 1877-'78 the following, namely:—122 Licentiates and Members, 24 Certified Clerks and 64 Certified Apprentices.

The Treasurer's Financial Statement will be laid on the table for your inspection; it shows a balance on hand of \$208.77.

The Council would take this opportunity of recording their thanks to the Rector of Laval University, Quebec, for his kindness in placing the rooms of the University at the disposal of the Association,



also to the *Union Médicale*, *Medical Record*, *Gazette*, *Star*, *Witness*, *Le National*, and *Minerve*, of Montreal, the *Chronicle* and *Canadien* of Quebec, and the *Pharmaceutical Journal* of Toronto, for gratuitous notices of proceedings of meetings which have from time to time appeared in their columns.

In conclusion your Council would again request every Licentiate and member, Certified Clerk and Certified Apprentice to make it a matter of duty to assist the Registrar in carrying out the provisions of the Act.

All of which is respectfully submitted.

E. GIROUX, *President*,

E. MUIR, *Registrar & Secretary*.

Mr. N. Mercer, in an able address, moved, seconded by Mr. W. E. Brunet, the adoption of the Report, and that the Report and Financial Statement be printed and circulated among the members.—Carried.

Moved by Mr. W. E. Brunet, seconded by Mr. H. R. Gray:—"That the thanks of this Association are due and are hereby tendered to the Rector of Laval University for his kindness in granting the use of the rooms of the University for our Annual Meeting."—Carried.

Moved by Mr. R. McLeod, seconded by Mr. J. B. Martel:—"That the thanks of this Association be presented to the retiring officers for their services during the past year."—Carried.

The Chairman nominated Mr. H. R. Gray, and Mr. R. McLeod scrutineers, who, having collected and counted the ballots, announced the election of the following gentlemen to the Council for the year 1878-'79:—E. Muir, J. Kerry, N. Mercer, H. Lyman, A. Manson, T. J. Tuck, W. E. Brunet, and R. McLeod. These, with the following, who remain in office, H. R. Gray, H. F. Jackson, E. Giroux, and W. A. Dyer, compose the Council of the Association.

W. H. Clare and D. Watson were elected Auditors.

A vote of thanks to Mr. E. Giroux, as presiding officer, was unanimously carried, after which the meeting adjourned.

(At a subsequent meeting of the Council, held in Montreal, the following were elected officers for the ensuing year, namely—President, E. Giroux; 1st Vice-President, Alex. Manson; 2nd Vice-President, H. F. Jackson; Treasurer, John Kerry; Registrar and Secretary, E. Muir. *Board of Examiners*.—H. R. Gray, Nathan Mercer, Alex. Manson, J. D. L. Ambrose, R. McLeod, H. F. Jackson, and J. B. Martel.)

E. GIROUX, *President*.

E. MUIR, *Registrar and Secretary*.

The great number of new remedies which have been brought before the notice of the medical profession within the last few years would indicate that more attention is being paid to *Materia Medica* and *Therapeutics* at present than heretofore. Within but a short time we have had Chloral Hydrate, Amyl Nitrite, Podophyllin, Sumbul, Bael, the Bromides of Pot-

assium and Ammonium, and many other valuable additions made to the British Pharmacopœia, while Salicylic acid, Gelsemium, Guarana, and Jaborandi are of yet more recent notoriety. But, besides these, the following may be considered *sub judice* as candidates also for admission into the *armamentarium* of the modern general practitioner; and many of them, there is no doubt, will be found not only very useful adjuncts to those we already possess, but also to answer special indications, and to supply wants long felt. It is not intended at present to enter into a discussion regarding the respective merits of these new remedies, though, hereafter, if those who give them a trial would kindly furnish us with the results of their experience, whether favourable or unfavourable, we would be happy to publish them for the general information of the profession. In concluding these remarks, we may state that any one or all of the remedies here mentioned can be procured from any respectable druggist in this city in the form of solid or fluid extracts, pills, troches, and elixirs:—

**BERBERIS AQUIFOLIUM.** Grows on the Pacific coast of the United States. The root is the part employed; it is said to be cathartic, diuretic, diaphoretic, tonic and alterative. It is almost a specific in secondary syphilis and scrofula, and is also useful in cancerous affections; in ague it is reputed superior to quinine; it has also cured enlargement of the spleen and of the prostrate body.

**BOLDOA FRAGRANS**—Boldo. Grows in Chili; leaves used. This is employed with the greatest success in blennorrhagia, atonic and bilious dyspepsia, chronic catarrh of the bladder; in hepatic abscess after the inflammatory symptoms have subsided, and is also a powerful anthelmintic.

**CACTUS GRANDIFLORUS**—Night-blooming Cereus. This is used in functional disturbance of the heart, palpitation, &c.

**CASCARO SAGRADO.** Its botanical source is unknown. It is said to be a certain remedy for habitual constipation.

**COCA ERYTHROXYLON**—Coca. Grows in Bolivia; the leaves are used. A powerful nervous excitant, somewhat resembling tea and coffee.

**COTO BARK AND COTOIN.** Brought from Bolivia. Cotoin is the active principle of the bark. Both are used in intestinal catarrh and dysentery.

**ERIODYCTION CALIFORNICUM**—Yerba Santa, Bearsweed—California. The whole plant is used as a remedy in laryngitis and laryngio-bronchitis, hæmorrhoids and gonorrhœa. It is expectorant, diuretic, &c.

**EUCALYPTUS GLOBULUS**—Blue Gum, Fever tree of Australia. The leaves and flowers are said to have been most successfully used in

remittent and intermittent fevers, typhoid fever, nephritis, diuresis, incontinence of urine, vesical catarrh, blennorrhagia, dysentery, chronic diarrhoea, gonorrhoea, cardiac and renal dropsies, pulmonary gangrene, and affections of the mucous membranes generally. It is tonic, anti-periodic, &c.

Externally the decoction is a disinfectant, deodorizer, and stimulant; it is employed with the happiest results in foul and cancerous ulcers, bed-sores, vaginitis, offensive leucorrhoea, chronic bronchitis, ulcers of the urethra, chancres, diphtheria. The active agent is an oil, (Eucalyptol), which is as good an antiseptic as carbolic acid; this oil relieves toothache.

**FUCUS VESICULOSUS**—Sea-wrack, bladder-wrack. This is used as a cure for obesity which it removes by restoring the tone of the system in general.

**GENTIANA QUINQUEFOLIA**—Five-flowered Gentian, Gall of the earth, Frost Bloom. Grows in the Susquehanna Valley. The whole plant is used in fever and ague instead of quinine, and when that remedy fails to cure. It reduces the temperature in all fevers; it is a good tonic in dyspepsia; furthermore, it is not poisonous.

**GRINDELIA ROBUSTA**.—Gum Plant of the Pacific coast of the United States. The plant and flowers are a reputed cure for hereditary and spasmodic asthma, pneumonia, chronic bronchitis, hay asthma, dropsy, and used locally in gonorrhoea, conjunctivitis, iritis, ulcers, &c.

**GRINDELIA SQUARROSA**.—California. This plant cures dumb ague.

**KAVA KAVA**. From the Sandwich Islands, recommended in gonorrhoea and chronic cystitis.

**GEOTHERA BIENNIS**—Evening Primrose, of the United States. The plant and flowers act as a mild sedative to nervous sensibility, influencing more especially the pneumogastrics. It is, therefore, very efficient in asthma depending on irritability and from chronic dyspepsia.

**PENTHORUM SEDOIDES**—Virginian Stone-crop. The plant is demulcent, laxative and yet somewhat astringent. It is employed in catarrh, pharyngitis, catarrhal laryngitis, chronic bronchitis, with profuse expectoration; and in catarrhal affections generally of the stomach, bowels and bladder.

**PHORADENDRON FLAVESCENS**—American Mistletoe. This must not be confounded with the English Mistletoe (*Viscum album*). The latter name, however, is, unfortunately, the one which has been erroneously given to the medicine now under description, and the extract is known only by the name of extract of *viscum album*, when it is in fact the extract of *phoradendron*. This remedy is an oxytoxic, said to be more reliable than ergot in labor.

**SABBATIA ELLIOTTI**—Quinine Flower of Florida. It is an anti-periodic and tonic like quinine.

**TRITICUM REPENS**—Couch grass, is indigenous. The roots are used in cystitis, acute and chronic, and are decidedly superior to any of this class of remedies in the British Pharmacopoeia, *Ura ursi Buchu* and *Pariera brava*. (Editor of MED. RECORD).

**TURNERA APIRODIZIACA**—Damiana of Mexico. The leaves and flowers are the medicinal parts employed. This is said to be a cure for impotence.

**URTICA DIOICA**. Is a new diuretic, said to be more powerful than any we possess in the Pharmacopoeia.

**USTILAGO MAIDIS**—Indian-corn Smut, corn-ergot, indigenous. The ergotized grains are said to be more reliable and more efficacious as an ebolic than ordinary ergot of rye.

**VIBURNUM PRUNIFOLIUM**—Black Haw. Grows in the South and Western States. The part used is the bark of the root and twigs. It is said to prevent abortion if given in time. Though it is a sedative on the uterus, it is a general tonic to the system. It is also good in some forms of dysmenorrhoea, menorrhagia, metrorrhagia, especially at the change of life. In menorrhagia caused by fibroid growths. It may be combined with ergot.

**XANTHUM SPINOSUM**—Spring Bur-reed. Grows in Europe. The plant is a powerful diaphoretic, and is said to cure hydrophobia. It is supposed to neutralize the effects of the virus of rabies.

**YERBA REUMA**.—The botanical source is unknown. When locally applied it cures nasal catarrh, gonorrhoea, leucorrhoea and gleet.

**DIALYZED IRON**.—Prof. Yandell of Louisville gives the following as characteristic properties of genuine dialysed iron:—"It has the faintest possible saline flavour and a mere suspicion of roughness. Slightly diluted, its taste recalls that of fresh blood. It is not in the least unpleasant, and does not blacken the teeth or tongue. It seldom or never produces any gastric disturbance or headache, and very rarely constipation. It is exceedingly reliable and rapid as a tonic."

He has examined nine different specimens of this preparation; and most he ascertained to be without the characteristics of taste and efficacy above enumerated, and chemical analysis, he remarks, readily "detects their deficiencies. One of the *spurious* specimens before alluded to was little less unpleasant than the tincture of muriate of iron, another was excessively acid, another was decidedly saline, another was exceedingly astringent, another was sweetish, an-

other was bitter, and another was seemingly only colored water; another more nearly approached correctness, but only a single specimen possessed the peculiarities of the true article." His attention was, he continues, "first directed to this matter through the failure or misbehaviour of the dialysed iron in practice. It is but just to say that the good specimen is from Wyeth & Brother, the original manufacturers of this medicine in America.

**THE SWEATING OF PHTHISIS.**—Dr. Nairne, of Glasgow, finds tincture of belladonna, as an external application, very useful to restrain the sweating in phthisis, a result which might have been expected from the success which attends its use in the distressingly profuse perspiration which is sometimes localized in the feet. (*British Med. Journal*.)

**AMYL NITRITE.**—The inhalation of the vapor of this remedy in aque at the commencement of the cold stage is said to cause a glow over the whole body, and the shivering fit comes to an abrupt termination. This agent has also been recommended in whooping-cough. (*Lancet*.)

**TOXIC PROPERTIES OF DYNAMITE.**—M. Bruet, in a Paris thesis, sums up with the following conclusions as to the toxic properties of dynamite in nitro-glycerine:—1. Nitro-glycerine is a poison, the energy of which is in direct proportion to the rapidity of its absorption. 2. It is most violent when quickly absorbed; a few drops are sufficient to strike down an animal in five minutes, and death follows in clonic and tonic convulsions. 3. It is less dangerous when absorbed slowly, and in this case kills by asphyxia, the fatal dose being rather high. 4. A man exposed chiefly to the absorption of nitro-glycerine has rather to fear the chronic or slight results than acute poisoning or death. But he should avoid all conditions which may expose him to rapid absorption of the poison, as in this case there would be danger of sudden death. 5. For these reasons it is not superfluous to take precautions against exposure to an atmosphere in which particles of dynamite are given off. (*Annali Universali di Medicina*.)

**TO RETAIN COFFEE AROMA.**—By mixing 25 per cent. of well dried bead crumbs with coffee, when grinding, a German chemist claims that the delicate aroma of freshly ground coffee will be retained for an indefinite period, which otherwise soon escapes. (*Druggists' Circular*.)

**BAY RUM.**—The following formula is said to produce an excellent article; four pints of alcohol, three pints of water, one pint of Jamaica rum, one drachm of oil of bay and twenty drops of oil of pimento; a few drops of aqua ammoniæ give the requisite color to a whole gallon.

**TO MAKE LABELS ADHERE TO Tin.**—Rich. Schuster recommends to add to about  $\frac{1}{2}$  pint of the paste 20 drops of so-called butter of antimony (concentrated solution of antimonious chloride.) The antimony is deposited in a metallic state upon the tin,

and forms a surface to which the paste easily adheres. Cupric chloride may also be used for the same purpose. Of course, both of these additions are poisonous, and the necessary care must be taken in their employment.

**DIVI-DIVI.**—Divi-divi, or Dividibi, or Libidivi, or Libidavi, are the fruits of *Casalpinia coriaria* Willd., forming twisted or S-shaped, dry, brittle, shining, chestnut-brown pods, containing between the external and internal shell a brittle ochre-colored mass. This is rich in tannin, containing between nineteen and forty-nine per cent. They were first brought to Europe by the Spaniards in 1768. At present they are exported from Caracas, Maracaibo and Curaçao, and are used for tannin, and dyeing of leather.

**MOLECULAR DIMENSIONS.**—Maxwell and S. Tolver Preston deduce from a series of researches the conclusion that one cubic-centimetre of air (a space occupied by about 16.3 minims) contains nineteen millions of billions =  $19 \times 10^{18}$  molecules, or 1,900,000,000,000,000,000.

"Adulteration of Santonin." An author states that he has met lately with samples of santonin, containing 22.5 per cent. of boric acid. The fraud is easily discovered by igniting the substance, dissolving the residue in boiling water, and allowing to crystallize, when boric acid separates, recognizable in the usual manner.

The following epitaph was written by a Dr. Godfrey, who died in Dublin in 1755:—

#### EPITAPHIUM CHYMICUM.

Here lieth to digest, macerate, and amalgamate into clay,  
In Balneo Arenæ,

Stratum super Stratum

The Residuum, Terra damnata and Caput Mortuum,  
Of BOYLE GODFREY, Chymist and M.D.

A man who in this Earthly Laboratory pursued various  
Processes to obtain Arcanum Vitæ,

or the Secret to Live:

Also, Aurum Vitæ,

or the art of getting rather than making Gold.

Alchymist-like, all his Labour and Projection,  
as Mercury in the Fire, Evaporated in Fume when he  
Dissolved to his first principles.

He departed as poor

as the last drops of an Alembic; for Riches are not  
poured on the Adepts of this world.

Though fond of News, he carefully avoided the  
Fermentation, Effervescence, and Decrepitation of this  
life. Full seventy years his Exalted Essence  
was hermetically sealed in its Terrene Matress; but the  
Radical Moisture being exhausted, the Elixir Vitæ spent,  
And exsiccate to a Cuticle, he could not suspend  
longer in his Vehicle, but precipitated Gradatim, per  
Campanam, to his original dust.

May that light, brighter than Bolognian Phosphorus,  
Preserve him from the Athanor, Empyreuma, and Re-  
verberatory Furnace of the other world,

Depurate him from the Fæces and Scoria of this,  
Highly Rectify and Volatilise his æthereal spirit,  
Bring it over the Helm of the Retort of this Globe, place  
it in a proper Recipient or Crystalline orb,  
Among the elect of the Flowers of Benjamin; never  
to be saturated till the General Resuscitation, Defla-  
gration, Cakination, and Sublimation of all things.

## Progress of Medical Science.

### TREATMENT OF CATARRHAL JAUNDICE BY ENEMATA OF COLD WATER.

We learn from a recent number of *La Presse Médicale* that Dr. Koull, of Gustrow, recommends this disease to be treated by injecting cold water into the rectum by means of an irrigator. The operation should be practiced once in the twenty-four hours. The quantity of water used should depend upon the susceptibility of the individual. The temperature of the water should commence at 12° Reaumur, to be decreased to 3°, as the bowel will not well bear the contact of the water when the temperature remains the same. Seven injections have been sufficient to effect a cure in the practice of Dr. Koull. This treatment removes the feeling of oppression at the epigastrium, the headache, anorexia, etc. In the majority of cases, after the second injection, the feces are colored with bile, and the color of the urine becomes more natural. In the opinion of the author, the cold water excites the peristaltic movement of the bowels, as well as the secretion of bile, the collection of which in the biliary passage is the chief obstacle to its free evacuation.—*Med. Press and Circular*.

### ROTUNDA LYING-IN HOSPITAL.

*Three Cases of Puerperal Convulsions. With Abstract of Clinical Lecture.*

By LOMBE ATTHILL, M.D.,  
Master of the Hospital.

Reported by J. C. CAMERON, M.D.

**CASE I.**—E. J., æt. 30 years, a patient in the extern maternity department, in her first pregnancy, was suddenly seized on the 30 Nov., 1877, with convulsions, after being in labour for five hours. Assistance was immediately sent for, and Dr. Smyly, Assistant Physician to the Hospital, and Mr. Horne, Clinical Clerk, were shortly in attendance. Meanwhile she had had two more convulsions, and had become quite unconscious. On examination the os was found to be fully dilated, and the head in the second position well down, with a large caput succedaneum formed. The pupils were dilated, the teeth clenched, the respiration and pulse rapid. Chloroform was immediately administered; and without delay, Dr. Smyly applied forceps and delivered a healthy male child. The placenta was expelled in twenty-five minutes. Some post-partem hæmorrhage occurred, but was easily controlled by ergot and injections of cold water into the uterus. No convulsions occurred after delivery, and the patient awoke from the chloroform quite conscious. The urine was carefully examined; no albumen was found, but abundance of lithates, and a few small hyaline casts, evidently of very recent origin.

**CASE II.**—F. D., æt. 19, admitted into the lying-in ward at 2.45 p.m., on Tuesday, November 20th, 1877.

On admission she was quite unconscious, in violent clonic spasms, face flushed, pupils widely dilated, pulse 130, respiration 30, temperature 101.4°; the os was about two-thirds dilated, the head presenting in the first position and well down in the cavity.

**Previous History.**—She had always enjoyed excellent health; had never noticed any puffing of the face, or of the upper or lower extremities. She has been married for fifteen months, and has had one abortion at the third month. Labour commenced at about 11 p.m., on Monday the 19th; the next morning, shortly after 7 o'clock, she complained of dizziness and inability to see objects in the room, and became quite unconscious, and at 7.30 the first convulsion came on. She was seen by one of the pupils of the hospital at 10.30, and was then in her fourth convulsion, and perfectly unconscious; the os was at that time dilated to about the size of a sixpence. She now passed rapidly from one convulsion into another till she was brought to hospital.

**Treatment and History.**—The administration of chloroform was begun at 3 p.m., the patient being in a severe tonic spasm. After a few deep inspirations the rigidity began to relax, and in a few minutes she was completely under the influence of chloroform. Contraction of the voluntary muscles did not return as long as she remained under chloroform, but at intervals of every four or five minutes until after the extraction of the child a peculiar gasp or sneeze, or rather a succession of short sneezes occurred, due probably to spasms (?) of the diaphragm; these sneezes disappeared as soon as the child was delivered.

At 3.20 a catheter was passed, but no urine was found in the bladder. Dr. Smyly then applied the forceps, and at 3.40 delivered her of a living female child. During extraction the pulse rose to 160 and became very feeble; but immediately after the birth of the child it fell to 110 and improved in volume. A hypodermic injection of liq. ergot.  $\text{mxx}$ . was administered when the head was distending the perineum, and at 3.50 the placenta came away. Chloroform was stopped, and in ten minutes a slight convulsion occurred; chloroform was re-administered immediately, and two hypodermic injections of chloral, grs. v. each, were given at intervals of ten minutes. On admission, ol. tig. gt. i. followed by calomel grs. v. had been given, but without effect; half an hour after extraction a turpentine enema was administered, and produced a tolerably free liquid evacuation. The pupils had now become quite contracted. At 4.18 a slight convulsion came on, but it was easily controlled by chloroform. The temp. was then 102.6°, pulse 84, resp. 26; another slight convulsion at 4.26, and a more severe one at 4.45, provoked by the nurse disturbing her to ascertain whether any bleeding had taken place. At 5.15 another severe convulsion was brought on by the application of a hot tin to her feet. Slight spasms occurred at 6, 6.20, 7.10, 7.28. At 7.55 she became somewhat restless, and moaned and

tossed herself about; as she could be made to swallow, a mixture containing potas. bromid. chloral hyd. aa, grs. x. in each dose, was ordered to be given every half hour, and was continued for three hours until she had taken one drachm of each salt.

*Last Spasm* was at 8.30, and was very slight. After this she drank milk freely and took her medicine nicely. At 10.30 a catheter was passed and about 1 oz. of urine was drawn off; on examination this was found to contain about half its bulk of albumen, and a large number of small hyaline casts, some of them containing granular matter; the casts were from the smaller tubes entirely; neither granular nor epithelial casts nor epithelium could be found.

At 10.45, temp. 100.6, pulse 110, resp. 24; two drops of croton oil were administered in mucilage, and during the night she had several copious, thin, watery motions. A hot linseed and mustard poultice was applied to the loins and renewed at intervals.

Nov. 21st.—She slept well all night and did not awake till 6.40 a.m., when a draught of pot. bromid. chloral. hyd. aa grs. xx. was given, and she dropped off to sleep at once. At 7.45 the temp. had fallen to 98.6, pulse 90, resp. 24. At nine the pulse rose to 132. A catheter was passed, and about a pint and a half of urine was drawn off, which upon examination was found to contain only about one-fourth its bulk of albumen and casts as before. At 10.30 she seemed for the first time to notice objects and persons, and answered correctly in monosyllables when questioned, and thenceforth her faculties seemed gradually to brighten. During the day her bowels were moved several times, but her urine required still to be drawn; her pulse varied greatly in rapidity and volume; her face kept flushing up rapidly, and then as rapidly turning pale, remaining, however, more constantly flushed than pale; her breathing at times became very laboured. During the evening the vagina was thoroughly syringed out with tepid water.

22nd.—Passed a good night; temperature 98.6, pulse 108, consciousness has quite returned. The urine drawn off in the morning was found to contain only a trace of albumen and casts as before. During the day symptoms of cystitis began to appear, and at night she was so restless that a draught of chloral hyd. grs. x., pot. bromid. grs. xv., was administered.

23rd.—She passed a good night. The urine has to be drawn about every three hours. It now contains no albumen, a very few casts, and a few pus cells.

25th.—Commenced to pass water herself; neither albumen casts nor pus cells.

On the 27th she sat up, and on the 29th left hospital.

In this case the memory was very slow to return, so that even on the eighth day after her confinement she could recollect but very few circumstances which had occurred in her own house for several days before labour began.

*Child*.—The child, when born, was very puny and feeble, and very great difficulty was experienced in establishing respiration. Every expedient usually resorted to was faithfully and perseveringly employed, and at the end of two hours an occasional slight gasp was the only sign of life. Artificial respiration was kept up continuously for nearly five hours before natural respiration was fairly established. The child lived for about twenty hours, and died on its way back to the hospital from the church where it had been taken to be christened.

The following table shows at a glance the variations in the temperature, pulse, and respiration throughout the case; the pulse and respirations were always taken while the patient was asleep or under chloroform, so as to avoid error as far as possible; no other observations are recorded in this table.

| DATE.    |           | TEMP.  | PULSE. | RESP. |
|----------|-----------|--------|--------|-------|
| Nov. 20. | P.M. 3.   | 101.2° | 130    | 30    |
| "        | 3.30      | —      | 160    | —     |
| "        | 3.45      | —      | 110    | —     |
| "        | 4.18      | 102.6° | 84     | 26    |
| "        | 10.45     | 100.6° | 110    | 24    |
| Nov. 21. | A.M. 2.15 | 99.4°  | 120    | 22    |
| "        | 7.45      | 98.6°  | 90     | 24    |
| "        | 12        | 99.0°  | 114    | —     |
| "        | P.M. 3.   | 99.6°  | 124    | —     |
| "        | 5.        | 99.6°  | 118    | 24    |
| "        | 12.       | 99.8°  | 122    | 22    |
| Nov. 22. | A.M. 9.   | 98.6°  | 108    | 20    |

*Table of Convulsions.*

Nov. 20, 7.30 a.m.—First epileptiform; severe.

10.30 a.m.—Fourth; severe. Seen by a pupil of the hospital for the first time. A succession of convulsions.

11.30 a.m.—Severe. A succession of convulsions.

2.45 p.m.—Severe. Admitted to hospital. One convulsion passing into another until chloroform was begun at

3 p.m.—Series of gasps under chloroform.

4 p.m.—Slight.

4.18 p.m.—Slight.

4.26 p.m.—Slight.

4.45 p.m.—More severe; provoked by nurse examining for post-partum hemorrhage.

5.15 p.m.—Severe; provoked by applying hot tin to the feet.

6 p.m.—Severe.

6.20 p.m.—Very slight.

7.10 p.m.—Very slight.

7.28 p.m.—Very slight.

8.30 p.m.—The last, hardly amounting to a convulsion.

CASE III.—C. McG., æt. 19, unmarried, probably a prostitute, was admitted into hospital about 11.30 a.m., on 3rd December, 1877, apparently suffering from extreme intoxication. A strong ethe-



real odour was very evident on her breath, her face was flushed and bloated, she behaved in a very violent, abusive manner, and was with the very greatest difficulty undressed and put to bed. She was partially sensible, and answered questions about herself when she pleased. Her friends having said nothing about her having had a convulsion, and the most natural conclusion being that she was drunk, she was allowed to remain quiet, and was disturbed as little as possible.

*History.*—She is a powerful, well-developed, stout, short-necked girl, of rather a bloated appearance. Has never borne children. Judging from her own appearance, from that of her relatives, and from the condition of the home in which she lived, she must have been addicted to the use of liquor. Her friends, when questioned afterwards, stated that labor began about 6 a.m., and that she had "a fit" at that time, and another in the cab on her way to hospital. Nothing could be elicited from them as to her general health, or as to the existence of œdema, etc., before labor began.

On examination the os was found to be the size of a shilling.

Shortly after admission, an emetic and a dose of ol. tig. had been given; both acted satisfactorily.

At 1.45 p.m. a severe convulsion came on. She passed rapidly from clonic to tonic spasms, she became perfectly livid, and the peculiar hissing respiration so characteristic in these cases was specially well marked. The administration of chloroform was at once begun; the respiration became less and less hissing, but at the same time more rapid and shallow, the lividity extended from the face to the neck, breasts, and upper extremities, the pulse became quite imperceptible, and respiration ceased suddenly, three minutes after the inhalations chloroform had commenced. Artificial respiration was immediately begun, Nélaton's method being used, and breathing was partially restored; venesection was also tried, but in spite of every effort the breathing gradually ceased, the heart became inaudible, the pupils dilated, and she was gone. As soon as Mr. Smyly and those assisting him were satisfied that life was extinct, he made an incision in the middle line, opened up the uterus, and extracted the child without delay; the placenta was attached in front. In spite of every effort to establish respiration, the child, which was a full-sized, healthy-looking male, never breathed, although after the ligature had been applied, the cord feebly pulsated for some minutes; but the impulse became gradually feebler and feebler, and finally ceased.

Shortly before death, about an ounce of urine was drawn from the bladder, and upon examination was found to contain rather more than half its bulk of albumen, a few granular casts, a large number of sanguineous casts, and hyaline casts with granular matter imbedded in them. The cast evidently came from the larger tubes, and pointed to not very recent Bright's disease.

*Remarks.*—These three cases are interesting as presenting three totally different phases of a terrible

disease; at the same time they possess some points of resemblance which makes their comparison a matter of considerable interest. All the patients were primiparæ; in the first two the convulsions came on during labor; in the third they appeared about the time that labor was commencing. The first case is an example of the mildest variety, the second was severe, while the third was desperate. In all, the urine gave evidence of more or less kidney trouble. In the first case there was no albumen, but the presence of a few small hyaline casts proved the existence of recent congestion; in the second there was a large amount of albumen at first, which decreased with amazing rapidity after delivery and after the secretions had been thoroughly re-established. The casts were in this case more numerous, but were still hyaline and from the smaller tubes, and persisted for some days after the albumen had disappeared; the congestion must have been more severe and must have lasted longer. In the third case there was still more albumen, the casts were more numerous, and of a more advanced type; several moderate-sized granular casts were found. The trouble in the kidneys must in this case have been of somewhat longer standing. Was the kidney affection in these cases the cause or the effect of the eclampsia? It might have been the effect in the first and second cases, but it certainly could not have been in the third.

In his clinical lecture upon these cases, Dr. Atthill, after giving the different theories most commonly held, and commenting upon the great uncertainty in which the pathology of the disease is still involved, drew particular attention to the fact that in cases of convulsions, albuminuria is almost invariably present, and that œdema of the face and extremities is the most constant and reliable premonitory symptom. He pointed out that although theoretically it was not definitely settled whether nephritis was the cause or effect, or a mere accidental accompaniment of convulsions; yet, practically, it was fully proved that if the presence of nephritis is detected in time, a judicious course of treatment is almost certain to ward off the attack, or, at least, moderate materially its severity.

After differentiating between an ordinary epileptic fit and a true puerperal convulsion, Dr. Atthill showed that chloroform owes its great value in these cases to its power in relaxing arterial tension, which is so greatly increased in convulsions.

To ward off an attack, the treatment is two-fold: 1. To remove or improve the nephritis by *purgation* and *counter-irritation*. No purgative is better than pulv. jalap co. Counter-irritation should be applied over the kidneys by cupping, or the application of hot linseed meal and mustard poultices over the loins, and diaphoresis encouraged. A Turkish bath might in some cases be of great value. 2. The diet should be absolutely unstimulating. Animal food should be withdrawn; milk and farinaceous foods are the most suitable. Outdoor exercise should be taken freely.

When convulsions have begun, the treatment con-

sists in: 1. Protecting the patient from injuring herself, by placing something between her teeth. 2. Trying to avert or modify the convulsions. The remedies most efficient for this purpose are:—

*Chloroform*, which is equally safe and efficacious. In one case Dr. Atthill kept a patient under chloroform for eight hours without a convulsion occurring; but as soon as chloroform was withdrawn, the convulsions returned in a modified form. By this means you are often enabled to tide the patient over until delivery has been effected, and the cause of irritation removed from the uterus.

*Chloral* is now largely used. To be effectual it must be given in large doses of grs. xxx or grs. xl. If the patient cannot swallow, it does very well administered *per rectum*: or it may be given hypodermically; but is very irritating, and is apt to set up cellulitis at the point where it is injected.

*Counter-irritation* over the loins is invaluable. *Purging* must be resorted to in order to relieve as far as possible the renal congestion. One or two doses of croton oil, which can in general be got down without much difficulty, answers best in such cases.

As the fœtus is the great cause of irritation, delivery must be effected as soon as possible, either by *forceps*, if the os be well dilated, and the head below the brim; or by *turning*, if the head be above the brim, and the os not well dilated.

That operation should be selected which, under the circumstances, will require the least handling, and will cause the least degree of irritation to the irritable uterus.—*Dublin Med. Press and Circular*.

#### THE VOMITING OF PREGNANCY AND ITS TREATMENT.

By M. O. JONES, M.D., of Chicago. With notes of a case by J. MARION SIMS, M.D.

Although a secondary or reflex manifestation, the vomiting of pregnancy is of such frequent occurrence, and often obstinate persistence, as to have acquired a name and a place in medical literature.

We know that pregnancy, in perhaps a large majority of cases, if, indeed, there is an exception, gives rise to morbid conditions of some organ or organs, continuing during a part, and sometimes the whole term, of gestation. There is a susceptibility of the system to excitement during pregnancy that does not exist at other periods, owing, no doubt, to the intimate connection of the organs of generation with the cerebro-spinal and the ganglionic systems of nerves. The functions of the brain, those of respiration, circulation, secretion, digestion and nutrition, may one or all be disturbed by conception and the development of a new life within the old.

The stomach is usually the first organ to sympathize, and it is generally independent of any noticeable change of temperature or disturbance of circulation. This sympathy of the stomach is of various degrees of intensity, from a fasti-

dious taste and appetite to nausea and vomiting. The period after conception at which this disturbance commences, and the length of time it continues, vary in different individuals as well as in the same subject in succeeding pregnancies. While in some persons the nausea, or morning sickness, as it is sometimes called, commences almost immediately after conception, with the majority it does not begin until from the third to the fourth or sixth week of gestation, and usually terminates at about the fourth month. It sometimes continues more or less severe until the termination of gestation. There are others in whom this reflex disturbance is not severe: the fifth, sixth, or seventh month of utero-gestation, and yet others who are free from this sickness throughout the whole period of pregnancy.

The violence and frequency of the vomiting are sometimes so intense and persistent as to destroy the life of the patient. Cases have been reported where, from the inability of the stomach to retain the least particle of nourishment, death has resulted from starvation. Dr. Marshall Hall speaks of a case which occurred under his notice, but not in his care, in which "the vomiting continued in spite of every remedy which intelligence could suggest, and which terminated fatally at the seventh month." The reported cases are numerous where death was averted either by spontaneous or induced labor.

A case is reported in the *Lancet* for 1838, of a lady who soon after her marriage ceased to menstruate, and became affected with morning sickness, which soon became so violent that nothing could be retained by the stomach. In this case, the report says, "the disorder was strangely attributed to disease of the pylorus. The sickness and extreme emaciation were the only symptoms present; after death no morbid appearances were found in any part of the body; a fetus about four months old was in the uterus." This patient, it would seem from the foregoing statement, was literally starved to death. Dr. Davis, in his "Obstetric Medicine," relates similar cases. Dr. Dance, of Paris, reports a case that, "during the second month after the arrest of the catamenia, was harassed with almost constant vomiting, rejecting everything she took, whether liquid or solid, rapid emaciation following. Tongue clean and moist, no febrile symptoms present, no tenderness of the epigastrium on pressure, sleep interrupted, habitual constipation, vomiting both night and day. The matter ejected was of a greenish or limpid character, and small in quantity. The patient did not think herself pregnant, and there was no enlargement of the hypogastric region. All remedial measures were used without benefit: ice internally and externally, leeches, blisters, anti-emetic draughts, opium internally and externally, and twenty other remedies, without having the slightest effect in checking the vomiting. Emaciation in this patient by the end of May had made great progress; and

now the hypogastrium began to be prominent, and pregnancy was not until then ascertained to exist, which was fully four and a half months. On the 2nd of June she died." I have quoted thus fully from this report, because it furnishes a very good type of the inveterate cases of vomiting during pregnancy. In this case the patient suffered almost from the beginning, vomiting continuing with increasing severity until death; almost five months pregnant. The report upon the post-mortem examination says: "No lesion could be detected in the stomach; except a slight reddish tint of the mucous lining, the whole intestinal tube was sound. The uterus rose a few inches above the pubes, and its parietes were preternaturally soft and flabby, but without any other appreciable change of structure. The membranes of the fetus were transparent throughout, but between these and the uterus were false membranes forming a layer some lines in thickness, exactly resembling those found between the pleura after inflammation; the same was found between the placenta and uterus, but more of a purulent character."

Another case, reported by M. Dance, did not reveal any products of inflammation between the uterus and membranes. Was not the uterine inflammation in the first case rather in consequence of, than the cause of, the violent and protracted vomiting? Would not inflammation producing such grave symptoms end in abortion or death before the expiration of four and a half months?

Pathologists (many, at least) attribute this reflex manifestation to the distension and development of the dense uterine structure after conception.

Dr. Graily Hewitt, however, in a paper read before the London Obstetrical Society in 1872, attributes the sickness and vomiting in pregnancy, in a majority of cases, to the irritation caused by flexion of the uterus, either ante or retroflexion. Owing to the flexion the uterine fibres and nerves at that point are compressed, and this compression is increased up to a certain period by the constant increasing development of the gravid uterus; and when pregnancy advances to the fourth month or more, the flexion is more or less corrected by the natural rising of the uterus from the pelvic cavity, after which, he says, the sickness and vomiting generally subside. He believes this to be the "almost universal cause of vomiting in pregnancy." That the tissues of the uterus resist expansion is, he says, unquestionably the case, "but this is not enough, apart from the conjoined flexion of the organ, to account for more than a small number of cases. Dr. Hewitt says he has not had an opportunity of examining cases of vomiting in pregnancy after the fourth month, and is not sure how often vomiting is noticed in this degree after that period, and therefore cannot pronounce any opinion derived from actual obser-

vation as to the state of the uterus under such circumstances. He, however, admits that "there are probably a small number of cases in which the vomiting persists even after the flexion has been remedied by the gradual development of the gravid uterus." So far, he says, "as the pathology of this affection is concerned, the ordinary cases, where the vomiting is very slight, and hardly calls for medical attention, is due (in his opinion) to a temporary evanescent flexion of the uterus." M. Brian attributes the reflex irritation to anteversion or retroversion of the uterus. It is probable that these abnormal positions of the gravid uterus may aggravate the sickness which is almost a concomitant of pregnancy, but are not the causes of it. Conception, perhaps, rarely occurs without being followed sooner or later by a sympathetic manifestation of some kind in some organ; no doubt, in many persons, in so slight a degree as to escape special notice, but in a large majority sympathetic or reflex phenomena of various kinds, such as an undefinable sinking sensation about the epigastrium, a slight fullness of the head, dizziness, palpitation of the heart, oppression in breathing, loathing of food, heartburn, eructation (sometimes acid, sometimes not), nausea, vomiting, constipation, diuresis, headache, etc., etc. And there are some women who know to a surety, by being troubled with some one or more of these manifestations, that they are pregnant. Disturbance of the stomach is, however, the most frequent reflex affliction of pregnancy. Several members of the London Obstetrical Society took exception to Dr. Hewitt's paper as to the cause of vomiting stated therein, saying they had known flexion and pregnancy co-existing without sickness, and, on the other hand, had frequently met with nausea and vomiting without flexion.

As to the treatment, we know how unsatisfactory have been our efforts to relieve this affection by the exhibition of drugs. I do not allude to the mild cases which require but little or no attention, but the excessive and persistent cases of vomiting, where the patient, in spite of all remedies, continues to grow day by day more feeble and emaciated. It is wonderful the number of remedies which have been suggested by different authors and contributors. Purgatives, emetics, anti-emetics, vegetables and mineral acids, alkalies and ant-acids of various kinds, anti-spasmodics, narcotics of every variety, internally, externally, and hypodermically administered; tincture of iodine in minute doses, oxalate of cerium, effervescent nitrate of cerium, aconite, various effervescing draughts, bismuth, strychnia, etc., etc., to the end, with varying success, sometimes with no success at all. Believing that the vomiting of pregnancy is a reflex phenomenon, is it not strange that nearly all our efforts to relieve it have been mainly directed to the stomach, the helpless sufferer from

the fault of another organ? Why not direct our curative or corrective measures directly to the source of mischief? Impressed with the correctness of this idea, I decided to put it in practice in the first case that might come under my care.

It has been now six years since my first opportunity of testing this idea, and within that time I have treated five cases, and in each case a very gratifying result ensued. I thought by exciting an irritation or superficial inflammation of the os and cervix uteri, the reflex nervous phenomena would be concentrated at the point of irritation, and thereby relieve the stomach.

To the first patient I applied the solid nitrate of silver to the os uteri only. The benefit was very noticeable within twenty-four hours. Being somewhat apprehensive, I applied the caustic rather sparingly, and in a few days applied it again, obtaining still greater relief. I used it a third time, but suspected the third application was really unnecessary. The patient remained free from sickness or vomiting to the end of gestation. To the second case the caustic was applied twice only. Improvement followed the first, and complete relief the second application. The third patient required but one application; it was used more freely than the preceding cases, and applied to the os and a portion of the cervix uteri. The fourth patient needed but one application, and this was one of the most harassing and persistent cases of vomiting that ever came under my care. The stomach rejected everything taken into it, and the patient grew feeble and became so emaciated that she was scarcely able to leave her bed. The caustic in this case was very freely applied to the os and vaginal cervix. The relief obtained was beyond my expectation, for it was almost immediate. She vomited only twice or thrice in the thirty-six hours following, and no more after that time. She was able to retain food; assimilation was good, and she gained rapidly in health, strength, and flesh. The fifth case was one in which the vomiting was not so frequent, but quite as persistent. In this case, in addition to the vomiting, the abdomen was quite tender—as I supposed, from the violent retching. The caustic in this case was applied twice before entire relief was obtained.

In all of these cases, before resorting to the caustic, I had faithfully tried, and for some time, remedies which are usually resorted to in such cases, without any benefit whatever in the fourth and fifth cases, and only temporary improvement in the others. These were all cases of first pregnancy, except the second one. In the first and second there was slight erosion of the mucous lining around the os; in the others none whatever, all three being perfectly healthy in appearance.

#### NOTES OF A CASE, BY DR. MARION SIMS.

I had the good fortune to meet Dr. Jones, of Chicago, last June, when he incidentally related to me his experience in the treatment of the vomiting of pregnancy. I thought the matter of so much importance that I begged him to write it out for publication. Accordingly he sent me the foregoing paper, which I received just as I was leaving home, and not having time to arrange for its publication there, I now send it to the *Lancet*. I am not in the way of seeing much of this affection, but a case came under my observation a few days ago so strongly confirmatory of Dr. Jones's views that I take the liberty of appending it to his paper.

Madame de C —, aged twenty-two, married at sixteen, was a very delicate child, but is now a tall, handsome woman, weighing 175 lbs. She has one child four years and a half old. During her pregnancy she suffered from nausea for two months or more, but not enough to cause anxiety about herself, and she was safely delivered at the full term. She did not nurse the child, and conception occurred again a year after its birth. Nausea began with conception, and continued unabated for two months, when she miscarried. This was at Arcachon, in 1874. In 1875 she conceived again. Conception was immediately followed by nausea, which persisted in spite of the usual remedies, and she miscarried again at the end of the second month. This was at Havre. In 1876 she miscarried a third time in New York, at the end of two months from the prostration of nausea, which began, as before, at the time of conception. She had the ablest counsel in New York—namely, Dr. Wm. Jones, Dr. Thos. F. Cock, and Professor Barker. Her life was in great danger with each of these miscarriages; and the distinguished accoucheur, Professor Fordice Barker, told her she would hardly survive another such trial as she had just passed through.

I saw Madame de C — on Oct. 24th, 1877. She gave me the history of her miscarriages, and said she feared she was pregnant again. She had just missed her period, and for the last ten days had felt such nausea and disgust for food that she was sure she was pregnant. I gave her some bismuth to take during the day and some bromide of sodium at night. She returned on the 29th, complaining more than ever of nausea, and I prescribed oxalate of cerium. Four days after this Madame de C — sent for me. She had been confined to her bed for four days, so nauseated that she could not take any nourishment whatever. She did not vomit, but she was completely prostrated by the constant nausea and starvation. She was so changed in appearance since I last saw her that I thought there must be something more the matter with her than the mere nausea of pregnancy. Was it malarial? She had just moved

into a new house. Her little boy had been complaining for several days, and her maid-servant had some malarial symptoms requiring quinine. Madame de C— had lived in malarial regions in America, and she imagined herself worse on alternate days. Thinking there might be a malarial element in her case, I ventured to give her ten grains of quinine in two doses, which unfortunately produced both vomiting and purging, and greatly augmented her prostration. She was now worse than ever. She had had no sleep for two or three nights, and was altogether in a most miserable plight. So I concluded to quiet both stomach and nervous system by bromides, and gave her 120 grains between 5 P. M. and 2 A. M. But she did not sleep, and her condition was now such as to alarm the family. They were evidently as much dissatisfied with my empirical treatment as I was myself. Beginning, at last, to look upon the case as one purely of nausea of pregnancy, I determined to try local treatment.

There was right lateral antelexion. Both lips of the os tinea were granular, and covered with a profuse glutinous leucorrhœal secretion. It was a case in which Dr. Graily Hewitt's pessary treatment might have been tried, or Dr. Copeman's plan of forcible dilatation of the os and cervix. The os had been considerably lacerated bilaterally during her labor. The anterior lip was everted as well as eroded, and the finger could easily have been carried into the canal. But having previously made up my mind to try Dr. Jones's method, I cleared away the leucorrhœal discharge, and applied a solution of the nitrate of silver (two drachms to one ounce) freely over the whole surface of the cervix till it was well whitened, and I stopped all other medication. On the next day I found Madame de C— sitting up in bed, and as bright and cheerful as possible. The change in her voice and general appearance was marvelous. She had had a good night's sleep, the first for a week. She had taken a liberal breakfast, the first good meal for a fortnight, and altogether she felt herself a new being, compared with what she was the day before. A show of blood followed the application of the nitrate of silver, and she began to hope that it was a real menstruation. At the end of five or six days there was some nausea, but not at all distressing, and I penciled the neck of the womb with pure carbolic acid till it was completely enveloped in a whitish film. On the next day she said she was perfectly well. On November 19th she came to see me, saying that family affairs called her to New York, and she wished to have the carbolic acid applied again as a precautionary measure. She had occasionally nausea, but it amounted to nothing. It did not prevent her from sleeping and did not prevent her from eating. She had never felt so well before during the first two months of any of her pregnancies.

If Dr. Jones's treatment acts as promptly in all other cases as it did in mine, the profession will certainly feel grateful to him for it.—*London Lancet*.

#### EUCALYPTUS IN MEMBRANOUS CROUP.

Dr. Walcher claims to have had great success in the treatment of membranous croup, both in its primary form and in the form which he regards as secondary to diphtheria of the pharynx. He employs the alcoholic tincture of eucalyptus globulus. Prof. Gulber and Dr. Gimbert of Cannes have shown that eucalyptol, the active principle of the eucalyptus, has a special action on chronic catarrh with muco-purulent secretion, especially when located in the lungs, and that the resinous principle is chiefly eliminated through these organs. Dr. Walcher employed it with benefit in doses of from  $2\frac{1}{2}$  to 5 drachms per diem in cases of chronic bronchitis in old people and in a case of pulmonary gangrene that recovered. He then tried it in several cases of croup, and it succeeded beyond his expectations; in one case the cast of the entire trachea and of the first and second bronchial bifurcation was coughed up, and the patient, a child five years of age, recovered. He has now discarded local applications, and orders an ounce of the tincture of eucalyptus with three ounces of syrup, a teaspoonful of the mixture being given every hour. The children take it readily, and, if given slowly, any diseased part in the pharynx will be sufficiently impregnated with the medication. A mild emetic of ipecac is given occasionally, if the patient be strong enough to bear it. Cold drinks are given to relieve thirst; and cold applications are made to the head if there is much congestion. The child's strength is to be kept up by proper nourishment; the alcohol contained in this mixture is serviceable in this connection. Dr. Walcher has given five drachms and more of the tincture of eucalyptus per diem to a child five years of age, and has never known any bad symptom to be produced by it. Dr. Siegen thinks that it is indicated in all febrile affections of the respiratory organs and especially in whooping-cough.—*Gazette Medicale de Strasbourg*.—*New Preparations*.

#### SCARLET FEVER.

Prof. Hænoch bases a communication respecting scarlet fever upon 125 cases which have in any way departed from the normal course of the disease.

Anamolies of the fever: In the ordinary cases free from important complications, the temperature rapidly rises to  $40^{\circ}$  C. ( $104^{\circ}$  F.) and over, continues high during the existence of the exanthem with slight remissions in the morning (at most  $1.8^{\circ}$  F.), then it gradually



declines, becoming remittant until the complete disappearance of the eruption, when it sinks to normal. But not rarely is met with—after complete fading of the exanthem, and without existing complications—an intermittant fever with normal morning and exalted evening temperature, continuing for several days.

Among the departures from this course he makes prominent the following: 1. Slow accession of the initial fever. 2. Non-febrile course of the disease after an active initial fever. 3. Fever of an inverse type. 4. Fever with uncommonly insignificant temperature elevation. 5. Abnormally long continuance of the fever, occasioned mostly by complications or sequelæ, as otitis media or externa, diphtheria, pharyngitis, glandular and phlegmonous inflammations beneath the jaw.

Concerning the malignity of the affection, Henoch gives a case evidently malignant in which the patient was in a somnolent or delirious condition from the commencement. These sensorial disturbances are entirely dependant upon the height of the fever and they disappear with its subsidence. The cooling method, as also quinia and salicylate of soda, have been exhibited with success, while the antipyretic agents are always useless if the high fever is the expression of true malignancy, which depends on the virulence of the infection. The latter exercises its influence preferably upon the heart and announces itself particularly in increasing feebleness, irregularity and frequency of the pulse with which there is included coolness of the extremities, deadening of the sensorium, cyanotic coloring of the exanthem and albumen in the urine. These appearances mostly occur during the first days of the disease and the case is almost certainly fatal in which the pulse is enormously quick, 170 per minute and upwards, while at the same time the above mentioned symptoms of collapse continue. A likewise unfavorable prognosis must be given when these symptoms supervene after complete development of the exanthem. From the third to the fifth day of the disease there is a tendency to sclerotic (diphtheritic) inflammation; here also the character of the pulse has prognostic significance. An early occurring diarrhœa which stops of itself is also to be viewed as an unfavorable symptom, which often precedes the manifestation of worse appearances. The angina appears during the first days as a simple follicular inflammation and after the third or fourth day takes on the diphtheritic character. Of very serious import is coryza with an offensive serous secretion. Hoarseness occurring, which often excites great alarm, depends upon the catarrh extending to the vocal cords. Sometimes the diphtheritic process everywhere invades the air passages, although the scarlatinal diphtheria, unlike the true diphtheria, in general only has little tendency to descend from the pharynx to the larynx. Peculiar croupal symp-

toms are almost entirely wanting in scarlatina. The paralyzes characteristic of diphtheria are very rarely seen after scarlet fever. Intense dyspnœa only occurs from enormous swelling of the tonsils or other throat glands, occasioned by coryza. The solid infiltration of the fibrous tissues of the throat known as Angina Ludovici is very doubtful.

During normal scarlatina there is only little inclination to complication from diseases of the respiratory organs, but of the fatal cases at the post-mortem there was commonly found inflammatory affections of the respiratory organs which during life had been obscured by other malignant symptoms. Epistaxis often was observed in the first days of the disease. Bronchial catarrh which occurred in the eruptive stage of the fever, as also broncho and pleuro-pneumonia whilst not favorable, were yet not absolutely unfavorable symptoms. The serous membranes preferably become inflamed. Sometimes there was only pain in the joints without swelling or hindrance to movement. The latter is unfavorable. Sometimes a synovitis may become chronic. Further complications worthy of notice are inflammatory affections of the heart, and the resemblance to acute articular rheumatism is greater since also in scarlet fever chorea may occur under such circumstances. Moreover in scarlatina without participation of the synovial membranes, an endocarditis may develop. Of nervous symptoms, Henoch only exceptionally observed convulsions even in very severe cases. Twice he met with pain at the tips of the fingers mentioned by the older physicians; several times paralysis of the facial nerve, once from pressure of a swollen gland in the neighborhood of the mastoid process, otherwise caused by caries of the temporal bone; twice he saw chorea; once ataxia of the lower extremities, but he never observed paralysis.

Respecting the appearance of the external skin great variation in the exanthem was noticed. In a series of cases it was slightly developed and easily overlooked, and the physicians might be in doubt whether scarlatina existed or an ephemeral erythema, which not rarely appears in various febrile diseases of children—pneumonia, angina, etc. The so-called scarlatina variegata was a very frequent variety with which there appeared normal or only slightly reddened skin patches between very red patches. Sometimes there was a papular eruption closely resembling measles. He further noticed that scarlatina variegata was unfavorable while small blood extravasations in the skin appeared without significance. As products of more severe dermatitis were miliary vesicles or large pemphigoid bullæ as well as the sometimes observed true urticaria weals (quaddeln). The upper and lower lip, the chin and the region of the nasolabial folds remained entirely free from implication. The change of the normal red color

into a dirty livid or cyanotic color is to be viewed as an unfavorable symptom. The author only rarely saw gangrene of the skin, but on the other hand subcutaneous abscesses were proportionately frequent during convalescence. In two cases of scarlatina without exanthem no form of desquamation was noticed, but two cases of true scarlatina recidivous were met with. Desquamation of the epidermis followed these secondary attacks like the first.

In regard to treatment where stimulants were indicated, the author gave preference to wine, brandy, coffee in large doses, camphor and musk. If deglutition is impossible through enormous swelling of the fauces nutritive clysters are employed together with hypodermic injection of camphor, as oil of camphor or in the following form: Camphoræ trit., gr. ix., spirit vin. rect., aq. dist. aa gtt. iv. M. Sig: Inject a syringe full. Where an antipyretic treatment seemed advisable lukewarm baths were employed (24° C. 75° F.) since in consequence of too energetic cold bathing he feared collapse in scarlet fever. He also employed cold sponging, or hydropathic envelopment of the whole body.—*Charité-Annalen*, 3 Jahrg. 1878.—*Deutsch. Ztschr. f. Pract. Med.* No. 23, 1878.—*Allg. Med. Cent. Zeit.*, June 19, 1878.

#### THE TREATMENT OF DIPHTHERIA.

BY C. E. BILLINGTON, M.D.,

VISITING PHYSICIAN TO DEMILT DISPENSARY.

In this paper will be presented the method and the results of the treatment of diphtheria in the north district of Demilt Dispensary during the past three years, with some accompanying observations and corroborative facts. This will necessarily include a brief recapitulation of some statements that have previously been published (*Transactions of the New York Academy of Medicine for 1876*, page 286). Except in the form of brief abstracts, they have come into the hands of only a comparatively limited number of the profession. It may, perhaps, be admitted that their practical importance renders them worthy of general consideration.

In 1869 I was appointed (out-door) visiting physician to Demilt Dispensary. I had previously become, by some sad experiences, intensely interested in the problem involved in diphtheria—a problem in regard to which the confusion of the young practitioner could only be “worse confounded” by the chaos of conflicting solutions afforded by the literature of the subject. I therefore eagerly availed myself of the opportunities of studying it which occurred in increasing numbers each year in this service.

I indulge in so much of personal history to show that the beliefs and the practice with which I was prepared to encounter the great epidemic of 1875 were no recently formed conclusions—

bore no relation to any theories of others, “bacterian” or otherwise; but rested on the solid basis of induction from independent, careful, and oft-repeated clinical observations.

The most important of these beliefs was that diphtheria is, to all practical intents at least, primarily a local disease, becoming constitutional only by absorption. Some of my reasons for this belief may be found in the paper above referred to; others, in the *New York Medical Record*, March 3, 1877, page 140, and still others may at some future time be published.

This view suggested the development of an appropriate method of treatment, and was in turn corroborated by its results—as strikingly in cases of failure as in those of success.

I shall first present the method of treatment. Simple as it is, it was the result of many anxious trials of a variety of agents in various combinations through alternate success and failure for several years preceding 1875.

That I had, during this period, ample opportunities to become familiar with the *diagnosis* of the disease in question, will hardly be disputed.

For the *rationale* of the employment of these combinations I must refer the reader to my previously published paper.

#### FORMULÆ.

##### No. 1. *Iron and Glycerine Mixture.*

R. Tinet. ferri chloridi.....fl. 3 i.—3 iss.  
Glycerinæ,  
Aquæ.....aa fl. 3 i.

##### No. 2. *Chlorate of Potash Mixture.*

R. Potassæ chloratis.....3 ss.—3 i.  
Glycerinæ.....fl. 3 ss.  
Aquæ calcis.....fl. 3 ijss.  
M.

The weaker strength indicated of both mixtures is the one I generally employ.

I formerly used for a time and published as a substitute for No. 2, a combination of salicylic acid,  $\mathfrak{D}$  i.; sulphite of soda, 3 i.; glycerine, 3 ss.; water, 3 ijss. As this is less pleasant than No. 2, and probably no more efficacious, I have discontinued its use.

##### No. 3. *Spray Mixture.*

R. Acidi carbolici..... $\mathfrak{M}$  xv.  
Aquæ calcis.....fl. 3 ij.  
M.

To be used with a small hand atomizer, which I much prefer to the steam apparatus. Codman & Shurtleff's No. 56 is the most convenient. This mixture is more pleasant and less irritating, and probably more efficacious, than the more complex and stronger ones which have lately been much used. It is of unquestionable utility in

laryngeal implication. Its pleasantness any one can test by throwing it in spray into his own mouth and throat.

#### RULES FOR TREATMENT.

I.—Give a teaspoonfull of No. 1 and of No. 2 alternately, every half-hour, except at night, when the patient may be allowed to sleep for an hour or two at a time.

II.—Spray the throat with No. 3 for several minutes at a time whenever the above mixtures are given—that is, every half hour. It is essential that the nurse be carefully instructed in the proper method of doing this. The mouth must be opened widely. When the child is too young to do this, the spraying must be omitted.

III.—When there is nasal implication, the nose should be thoroughly syringed out with warm or tepid salt water, once, twice, or three times a day. I have lately employed no other agent. It should be done with the patient's head inclined forward, after the method which is described in my above-mentioned paper. It is very important that the physician know how to do this well, and, generally, *do it himself*. I have always used a two-ounce hard-rubber ear-syringe. It is absolutely essential that this have a suitable nozzle, which is not always the case.

IV.—Do not (as a rule) apply any brush or swab to the throat. I sometimes throw a drachm of No. 1, with a syringe, directly against the affected surface in the throat.

V.—Do not (as a rule) give any quinine or other unpleasant medicine to children. This rule is of great practical importance.

VI.—Do not (as a rule) give alcoholic stimulants. Call this rank heresy—as the majority will! It is none the less true that your success will be greater without them. There are, of course, a few exceptions; those are the cases where a child that cannot be induced to take other nourishment will take weak milk-punch or egg-nog.

VII.—Nourish the patient with an abundance of cold milk, given frequently, to which a little limewater may often advantageously be added. This rule is of the greatest importance. Even a bad case may be regarded favorably while the patient continues to take nourishment well. When the stage of extreme exhaustion has been reached in bad cases, juice squeezed from beef-steak is a valuable addition to the bill of fare.

Simple as this method of treatment seems, its successful application in bad or protracted cases will require much skill, tact, energy, and perseverance. Let not any who may at first fail in its employment hasten to decide that the method is at fault. The efficacy of water in extinguishing fire is undisputed. There are, nevertheless, many instances of its unsuccessful application.

In my previous paper on this subject I used the following language, which some instances

that have since come to my knowledge have shown to be prophetic:

"If any shall adopt some of my methods, only to make them *part* of a treatment in which quinine, alcohol, etc., or topical brushing enter, I predict that they will be the very ones who will pronounce my system a failure."

The reviewer of a leading medical journal failed to find anything very distinctive in my method of treatment, because the drugs employed in it had previously been in general use. I specify the following as distinctive features: 1, the combinations, which are especially simple, pleasant, harmless and efficacious; 2, the convenient and unirritating methods of their application; 3, the frequency of their application. For others I refer back to rules IV, V, and VI.

The results of this method in 124 cases treated by me from the Dispensary, in 1875, were stated by me as follows:

"Of these 124 patients, 94 recovered and 30 died—24  $\frac{2}{5}$  per cent.

"That this rate of mortality is at least fifteen per cent. less than the average from genuine cases of diphtheria during that year in that district will, I think, be admitted by those best qualified to judge; though in the absence of full and accurate returns of the number of cases it would be impossible to prove it statistically. But it yet gives no idea of the actual results of my treatment, which I fortunately can show statistically and accurately.

"Of the 124 cases, 22 passed under the care of other physicians, in most instances after a single visit only, and, in some, without the medicine I prescribed having been procured, leaving 102 that continued under my treatment. Of the 102 that continued under my treatment, 88 recovered and 14 died.

"Of the 22 who passed under the treatment of others, six recovered and 16 died. The extreme badness of these latter results is partly to be accounted for by the fact that some of them were hopeless, and others severe cases, for which, on account of my unfavorable prognosis, other medical aid was called in.

"This is not, however, true of all, fully half of them having been by no means bad when I saw them. Some of them left my care through dissatisfaction at my not using topical applications. The results, in such cases, as I have since learned them, were particularly bad.

"Of the fourteen who died under my care, one was moribund when first seen, surviving only two hours; one was already a hopeless case of laryngeal croup; two others were hopeless cases from extensive membranous affection and marked indications of blood-poisoning. Deducting these, leaves ten deaths out of 98 cases in which the treatment was tested with some degree of fairness, or a little over ten per cent."

These results were obtained under all the well-known disadvantages that attend Dispensary

practice, and in a region which, as I showed statistically from the returns of the Board of Health, gave in that year a larger mortality from the disease in proportion to population than any ward in the city.

With the above I reported still better results obtained by this method of treatment in private practice, which I will not recapitulate here.

That results so favorable should excite incredulity was to be expected. One zealous dispute asserted publicly in opposition to my explicit statements and the probabilities, that my cases must have been "exceptionally mild" ones. The precise opposite was the fact. I cannot, however, deny that my cases may have been, *after a few days of treatment*, exceptionally mild as compared with some others.

From this *résumé* of results already published, I now proceed to those of the following year, 1876. In that year I treated from the Dispensary 37 cases, of which 29 occurred in the first four months. Then the epidemic quite suddenly abated, and only eight were seen in the remainder of the year.

Of these 37 cases, three passed, after a single visit, under other medical care—with what results I do not know; five others died, and 29 recovered.

Of the five that died, one, aged two and a half years, was moribund with laryngeal croup when first seen, dying in less than ten hours afterward. The only possible remedy, tracheotomy, was refused.

In another case which was bad, but not hopeless, when first seen, I returned on the second day to find the patient moribund. The parents, who were extraordinary specimens of perverse stupidity, acknowledged that they had not used the remedies furnished them, an old woman having told them that the spray would injure the child's eyes! I may here mention that I have in many instances, scarcely more favorable than this in respect to nursing, made up for the deficiency by very frequent visits on the part of myself or my assistants; otherwise I never could have obtained the results I have. In this instance, other engagements made this impossible.

Deducting from the five deaths these two cases in which the treatment was not employed, leaves three deaths out of 32 cases in which it was tested; or, again, a little less than ten per cent.

Among the twenty-nine cases that recovered were a full quota of severe ones, and four were among the very worst that were ever known to recover, as can be attested by competent medical witnesses. I condense a brief account of one of these from notes taken at the time:

Ann McFall, aged three years, 606 Second avenue, March 21, 1876. When first seen, great inflammation and swelling of the fauces; membrane on both tonsils and over soft palate; much enlargement of cervical glands. Extreme nasal

affection with profuse sanious muco-purulent discharge; excoriated nostrils and upper lip, and obstructed breathing. A great degree of blood-poisoning was evident from the characteristic hue and expression.

Expecting her death before the next day, treatment was nevertheless begun. The nose was thoroughly cleansed out two or three times every day by syringing with warm salt water, in which I was kindly assisted by Dr. D. C. Comstock. This proceeding was always followed by freer respiration and improved hue of complexion. The one favorable symptom was that the child could be induced to take milk quite freely.

The condition of the patient continued about the same for six days, the membrane having disappeared from the tonsils, but continuing on the faucial arch and uvula, and a large patch having formed on the tongue.

On the 27th the case was seen by Dr. W. T. White, who predicted its fatal termination. For the next five days the patient's condition continued critical, but gradually improved under the use of the same means, which were employed altogether for two weeks before the patient was considered out of danger. This case was repeatedly seen by Dr. W. E. Bullard.

Few cases, giving so much evidence of constitutional poisoning as this did, recover. It is to be noted that it was treated without stimulants or quinine.

Over-zealous advocacy may be of great injury to a good cause. I therefore say explicitly that I do not claim that such extremely bad cases as the above can, as a rule, be cured. Constitutional vigor is an important factor and sometimes of itself produces remarkable recoveries under all kinds of treatment. I do, however, believe, from not a few similar experiences, that this method, when effectively applied, gives, in all such cases, the best, and in some, the only chance of recovery.

It would be unpardonable forgetfulness should I fail to record my great obligations for most valuable assistance in the above-mentioned labors to Dr. D. C. Comstock, and to Dr. W. E. Bullard, who is now visiting physician to the south district of this Dispensary.

Aware that the endless repetition of statistics of cures resting mainly on my own unsupported assertions, could add little to the weight of the original ones, I adopted at the beginning of the past year (1877) the plan of having the cases occurring in my Dispensary service seen and the diagnosis verified by competent, disinterested, and well-known witnesses. Seventeen cases thus occurred during the year. I reserve the details of these cases and their results, with interesting and instructive facts connected with them, for publication when the number of such attested cases shall have become sufficiently large to be authoritative. I will only state at present that most of these cases have been kindly seen

either by Dr. W. T. White or Dr. Andrew H. Smith, and that the previous ratio of recoveries has been more than maintained.

I have frequently learned, with much gratification, that the method of treatment, which I have used and advocated, has proved successful in the hands of other physicians. No such instance has given me quite so much pleasure as was afforded by the receipt of the following letters from a stranger. The first one came to me in December last at the Demilt Dispensary. I transcribe it nearly in full, *verbatim et literatim*.

"FREDRICKTON, NEW BRUNSWICK,  
DOMINION CANADA, Dec. 5th, 1877.

"MY DEAR SIR:

"In September, 1876, when on my way to Philadelphia to the exhibition, and to again visit the city in which I graduated seventeen years ago, I called in New York on my friend and college mate, Dr. Edward Bradley. I observed on his table your pamphlet on diphtheria. I told him I must read it, having, I believed, had greater experience in that disease than any physician in our Province. I brought it with me, and strange to say, we have not had a visit of the disease in this city till this fall. The first cases did not occur in my families. They nearly all ended fatally. The first I had to treat was my only son, aged fourteen years. He took the disease on the fifth day of his having mumps. In two hours after the first symptoms the whole throat was well covered with false membrane, and he sank at once into a drowsy state, from which he could be roused only with difficulty, the false membrane spreading rapidly. He was just such a case as was occurring in the city every day, and ending fatally in about two days.

"I took your treatment and followed it to the letter. In twelve hours he was much improved; in twenty-four throat quite clear, and he seemed bright and asked for food. In forty-eight hours there was not a speck of false membrane in his throat and has not been since. This is the fifth day. He is up about his room now, and took a good dinner of beefsteak. I really feel much indebted to you, and thought I must just say so to you. I cannot but think that had it not been for my good fortune in seeing your pamphlet, to-day would have been the day I should have had to bury my son.

"I have had to treat the disease, I think oftener than any physician in this city, and am regarded by many as having better fortune than any of my brothers, but I feel that the best I have ever done is far inferior to your treatment.

"May I ask you to forward me your treatment for adults? About one-fifth of our cases are young men and women.

"I have now been put pretty busily at work

with this disease, and feel confident that all are going to do well that I can have nursed well.

"Yours, very respectfully,  
T. CLOWES BROWN."

I replied that my treatment of adults differs little from that of children, consisting generally of the administration of Number 1 every hour or half-hour, with very frequent spraying. To this may be added, when indicated, the use of such gargles as a solution of mel. boracis, or of a little alum in sage tea, or the salicylic acid mixture, of which the formula is given above.

I also requested Dr. Brown to favor me with the results in his other cases, and to permit me to publish them with the interesting case of his son.

I received the following reply, dated Dec. 13th:

"Since the case of my son I have had to treat a number of cases of diphtheria, with the best possible result in every one.

"The most malignant case I have had was fortunately my next-door neighbor, a boy aged 13 years. He was ill with a cold about two days when throat symptoms showed themselves. I at once adopted your treatment—the iron and glycerine mixture, the salicylic acid and soda mixture, and spraying the throat; but in spite of the best nursing I could desire to have, and giving the case nearly hourly attention, it went from bad to worse until the fifth day; then for two days it did not seem that he could recover. He must have suffocated at different times had I not with dressing-scissors removed the partially detached portions of false membrane. At one time I took from his throat a portion of false membrane as large as your twenty-five cent piece and as thick as my little finger. This, for the time, gave great relief. The next day he must have smothered had I not removed the whole palate, which was one solid portion of false membrane as large and long as my little finger to the middle joint. The next day I had the throat clean. Since that time, once in twenty-four hours, it would re-coat itself, and the spraying would remove it—each day the coating getting thinner. He is now well, looks bright, and throat clear, but could you see it, you would not say he had elongation of the uvula!

"I have seen diphtheria in all forms, but never a worse case than this. I have seen whole families carried to the grave in one week with exactly the same type of the disease this boy had, and I believe he was saved by the iron and spraying. I just followed it up and awaited the result.

"Diphtheria has raged here this fall, nearly leaving childless some families. All plans of treatment have been tried; some relying on the sulpho-carbolate of soda, some on the strong acids, others on carbolic acid; but, to my mind,



your treatment in our present state of knowledge cannot be equalled."

I feel greatly indebted to Dr. Brown for these letters, and for his permission to make use of them, for the following reasons: First, his large experience with the disease enables him to speak with authority of cases and their types. Second, they illustrate the efficacy of this method of treatment, not merely in cases of diphtheria occurring in this city, but in a malignant epidemic in a remote region. Third, the perseverance with which Dr. Brown "just followed it up and awaited the result" in his worst case through seven discouraging days is noteworthy. It is too common to hear a physician, after treating a fatal case of diphtheria, say "everything was tried!" Fourth, the close personal attention, and the skill, dexterity, and judgment in the management of that case that are evident in the doctor's unpretentious narrative, show that my method, as carried out by him, was like good tools in the hands of a master-workman. Vaccillation, lack of energy, and want of tact and skill, may easily bring discredit upon the best method of treatment in a disease of such critical emergencies as is diphtheria in its bad forms. Fifth, the types of the two cases described in these letters are worthy of consideration. Although the doctor was doubtless right in regarding the former as malignant and of rapidly fatal portent, yet the exudation was evidently comparatively superficial, as was shown by its yielding so readily to proper treatment. The disappearance of the marked constitutional symptoms with that of the exudation is also noteworthy—illustrating the dependence of the former upon the latter. In the second case the exudation was deep in the tissues as well as thick and extensive. Such cases are the most formidable of all. Rapid removal of the membrane or its complete disinfection is impossible. The greater difficulty and the occasional failures in dealing with such cases, however, simply confirm the lesson taught by the other class as to the nature and the only useful treatment of the disease. Sixth, the age of these patients was the one favorable circumstance. Had it been under three years, such intensity of disease must have been almost necessarily fatal for the following reasons: the absorbents are at that age very active; and the resistance that is offered to throat-spraying and other necessary manipulations is a formidable obstacle to treatment. The very failures of the antiseptic method, when intelligently considered, furnish strong confirmation of the great principle that demands its employment.

The few remaining copies of my pamphlet will be gladly furnished, on application, to physicians who may wish to test this method of treatment in an actual epidemic of the disease.

Those who have fairly tested it in a number of cases, or who may hereafter do so, are earnestly requested to communicate to me the results obtained.

157 LEXINGTON AVENUE, NEW YORK.

—N. Y. Medical Record

#### THE DISEASES OF DENTITION AND THEIR TREATMENT.

While in general the process of dentition is to be considered a physiological one, yet it sometimes takes place with disturbances of the general condition, as well as with local irritations and abnormal processes, which must be recognized and attended. Sometimes it happens that children have teeth at birth, in which case the gums are diseased, and the teeth fragile and bad.

One must be cautious then about removing the teeth, because severe hemorrhages readily occur. The physician must likewise refuse, in spite of the wishes of the parents, to incise the gums when severe symptoms precede the cutting through of the teeth, a practice common in England, since the cicatrix formed by the incision offers greater resistance to the passage of the teeth. Only in extreme cases, when through the red and swollen gums the teeth can be seen, and the sickness is severe, should the physician conclude to incise.

In many cases dentition produces an *apthous ulceration of the mucous membranes of the mouth*, with occasional hemorrhages beneath the membrane, then the children must undergo careful treatment with potass. chlor. as if suffering from ulcerative stomatitis, and the mouth must be frequently washed and cleansed. Since this is difficult with children, it is recommended to inject into the mouth, with an india rubber syringe, the fluid consisting of borax dissolved in glycerine and water. The incision of the gums is to be regarded with greater caution in these cases, as we do not wish to add a new wound to a previously existing one. A frequent occurrence of skin affections belongs without doubt to the symptoms accompanying dentition. Light erythemata, which are to be regarded as congestions in the skin of children, are readily removed by powdering, bran-baths, and cleanliness. It is more difficult to cure eruptions during dentition, in children who have a pre-disposition to any disease, among which eczema impetiginodes is to be numbered. The popular belief that old milk will cause such eruptions, is not well grounded; we must rather accept, that, when a change occurs in the nourishment, as when a child receives an abundant supply of milk from a better nurse, or takes a mixed food, then the eruption takes place, while, on the contrary, when a more sparing nourishment is received, the eruption already present disappears. For the most part we observe such exanthemata in lymphatic children, who drink little and irregularly. In weak children the eczema generally takes a day to form.

A rapid cure—which is exceedingly rare—is not advisable; the important thing, therefore, is to remove the annoyance. When the eruption is on the head, it is recommended to let the children wear an india rubber cap after the hair has been cut off, and to remove the crusts by means of washes. When the eruption is on the body, and when there is itching, we use mild bath, and washes with a solution of phenic acid (1 grm. to 500 of water), or a solution of sublimate, 1 part to 1,000 of water. The skin may also be powdered with the following: Hydrarg ammon-chlorid, 1; zinc. oxid., 4; glycerine starch, 30.

A still more important attendant of dentition is diarrhoea, which, however, need be stopped only when it is very severe, and has a tendency to become chronic. Five or six soft stools, when the teeth are coming through, require no treatment, and interference is only needed when there are epidemics of cholera morbus.

Although the ordinary remedies are well known, yet the following formula may be recommended: Aq. calcis, parts 30; aq. fœnic, 40; syr. catechu, 15; tinct. opii, gtt. i-ii; or, at night a powder of hydrarg. c. creta, pulv. doveri, aa, 0.01 grm; or, according to West, ext. ligui campech, 4; tinct. catechu, 8; syr. simp. 10; aq. fœnic, 30; or, bismuthi nit. 0.1, or pulv. doveri, 0.01 grm.

The statement, that the diarrhoea is to be regarded as an extension of the inflammation from the mucous membrane of the mouth to the intestinal tract, will not hold, we must rather believe that it is caused by an abnormal condition of the gastric juice, whereby the digestion is disturbed, since the children, on account of the great thirst, drink more than is good for them. In addition to the medication then, we must see that the children take the breast or bottle at considerable intervals, and in the intervals receive sugar-water only. Meanwhile, in dentition an irritation of the bronchi, of a nervous nature, occurs, which may be removed by mild means, generally by syr. ipecac. with potas. brom., and tinct. hyoseyam. Finally, so far as the nervous symptoms of dentition are concerned, which show themselves by cramps, two kinds are to be distinguished. They are either reflex spasms, which are not dangerous, or they come from an inflammation of the meninges, and must be energetically combated. If the latter is the case, one or two leeches, according to the constitution of the children, are placed behind the ears, baths are given, and internally, potas. brom., or, as the author has frequently done, calomel with zinc. ox. is given. A few drops of chloroform are inhaled. The application of sinapisms, or other irritating substances, are used sparingly, so as not to add a new irritant to those present. In reflex spasms it is recommended to give potas. brom., and aq. valerian, and to use warm chamomile, or linden flower baths. (*Allg. med. Cent. Zeit.*, No. 39, 1878).

A.G.D.

## CLIMATIC TREATMENT OF PULMONARY PHTHISIS.

BY

ALFRED L. LOOMIS, M. D.

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I pass to the consideration of the climatic treatment of pulmonary phthisis, a subject which at the present time is largely engaging the attention of the profession.

It is not my purpose to speak of the advantages or disadvantages of the different localities well known as homes for phthisical invalids localities which, during the past ten years, an enormous amount of pamphlet literature has brought to the notice of the profession, as well as before the public. I shall endeavour rather to indicate some of the conditions and considerations which should influence one in coming to a decision in regard to the climate or locality best suited to each phthisical patient who is amenable climatic treatment.

Before entering upon the discussion of the subject of climate as a therapeutical agent in the treatment of phthisis it seems necessary to briefly consider those anatomical changes which occur in the lung tissue in the course of this disease. Formerly, every variety of phthisis was believed to be due to a neoplasm called tubercle which was developed in lung tissue, and afterwards passed through a great variety of changes. At the present day many believe that there is nothing in these anatomical changes which cannot properly be classed under the head of inflammation. The processes of inflammation, as we now study them, are so numerous and varied that they include all the changes that are found in the lungs of those that die of any form of phthisis. While one class of these changes may be produced by inflammatory changes in the cell elements of the lung tissue, another class may be due to an inflammation which results in the production of serum, fibrin, and pus. Necrotic and reparative inflammatory processes may give rise to another set of changes in the lung; and a tubercular inflammation may cause the development of those nodular masses, concerning which recently there has been so much discussion. While I recognize the fact that in many instances it is very difficult to draw the line of distinction between what has been called tubercle, and the changes produced by one or all of these inflammatory processes, I am inclined to the opinion that pulmonary phthisis is no more specific in its character than is chronic interstitial nephritis, and the varying appearances presented by the lungs in those who die of pulmonary phthisis are accounted for by the variations in the type, and in the primary seat of the inflammatory changes, combined with their different stages of evolution.

\*Read before the American Medical Association, at Buffalo, June, 1878.

In one class of cases the primary changes are in the cavities of the alveola and bronchi, and are epithelial and cellular in their nature. This class I would include under the head of catarrhal phthisis.

In another class of cases the primary changes occur in the bronchial and alveolar connective tissue, and are connective tissue hyperplasias. This class I would include under the head of fibrous phthisis.

Again, in another class of cases the primary changes occur in the lymphoid elements of the lung in which hyperplasia of the lymphoid elements, associated with connective tissue hyperplasia, form little masses or nodules, which are ordinarily termed tubercle. This class I would include under the head of *Tubercular Phthisis*. These different anatomical changes in the lungs differ so widely and give rise to such varying phenomena, in the course of their development that in order properly to estimate the value of remedial agents, the power of hygienic surroundings, and of climate to prevent or arrest their development, there must be a careful analysis of our cases that we may determine the variety and stage of development of each case which comes under our observation.

In tubercular phthisis I have never known climate to produce favorable results, while in the other two varieties it has shown such power in arresting and controlling the disease that I have been lead to the careful study of those climatic conditions which are able to produce such results. Although we are unacquainted with any climatic conditions which render the development of phthisis a necessity or an impossibility, we do know that there are certain climatic conditions which are antagonistic to its development.

With our present knowledge of the etiology and morbid anatomy of this disease we must believe that the primary catarrhal processes, as well as the later phthisical developments, depend to a very great extent upon atmospheric influences, their mode of action as yet we do not fully understand. We cannot even satisfactorily explain "how we take cold." We can only say that among these active atmospheric influences are temperature, humidity, and some atmospheric element as yet undetermined. If one who is exposed to these influences has no phthisical tendency, either hereditary or acquired, he has simply a bronchitis or pneumonia; if, on the other hand, he has a phthisical tendency then these influences produce or lead to those changes in the lung structure which are recognized as phthisical developments. These may be of the character of catarrhal pneumonia or peri-bronchitis. Taking cold cannot be regarded as the cause, it only awakens the phthisical tendency into activity.

There can be little question but that there are certain atmospheric germs which, when drawn

into the lungs on inhalation act, in a chemico-local manner. They act not only upon the surface of the mucous membranes, but originate destructive processes in the lung parenchyma. Even when phthisical constitutional tendency does not exist in an individual, particles of dust mixed with the inhaled air taken into the lungs will excite inflammation by their continuous mechanical irritation.

This inflammation is not limited in its effects to the mucous membrane and its epithelium, but by penetrating deeper produces destruction in the lung substance, and thus excites processes which end in cicatrization and thickening, or necrosis and ulceration, and finally develop a condition of phthisis. If this occurs in perfectly healthy individuals we can readily understand how, under such influences, phthisis will more readily and certainly be developed in one with a constitutional tendency.

Dampness of the atmosphere depending on dampness of the soil is unquestionably a powerful agent in developing phthisis. If to this is added the inhalation of dust and unwholesome germs, the chances of developing phthisis must be greatly increased.

During the past few years in our country and in foreign lands, monographs have been published containing carefully prepared tables in regard to the temperature range of different health resorts, the amount of rain-fall, the degree of atmospheric pressure, the prevailing winds, the altitude, etc. Some localities are mentioned as especially desirable for phthisical invalids, on account of their equability of temperature, other places are recommended on account of their luxuriant vegetation or the peculiarity of the soil. Some are thought desirable on account of their dryness of atmosphere, others on account of the humidity of the atmosphere.

Vague and uncertain are the statements found in the literature of this subject, and widely different conclusions have been arrived at by various observers. Places which at one time were the favorite resorts of consumptives have been abandoned as unhealthful and dangerous. Directly opposite views are held in regard to the therapeutical value of the same resort. An educated physician, who was in the last stage of this disease, and who had vainly tried all climates, expressed what I mean, when he said to me: "In attempting to follow the instructions of my New York adviser, and also those of my Philadelphia medical adviser, the one recommending a cold, and the other a warm climate, I made the result a failure."

We need not be surprised at all at this if we consider what a revolution has taken place within the past ten or fifteen years in regard to the morbid anatomy and etiology of phthisis; its climatic treatment would necessarily have

correspondingly changed, if it were based exclusively on theoretical grounds.

Fifteen years ago the belief prevailed that the essential climatic element for the arrest or cure of phthisis was a warm, dry atmosphere. More recent observations and investigations have settled the fact that phthisis is not necessarily hastened in its development by a low temperature, neither is it prevented or cured by a high temperature. As yet, no one has found the ideal climate for the phthisical invalid. Again, it has been claimed that the higher the altitude the fewer were the cases of phthisis, until at a certain elevation it entirely disappeared, and that this diminution in the number of case was due to diminished atmospheric pressure. More extended observation has demonstrated that the altitude at which this proposed immunity exists varies with the latitude, that the nearer the approach to the equator the higher must be the altitude in order to accomplish the desired result. This fact seems to prove that the development of phthisis does not depend upon atmospheric pressure, for the laws which govern atmospheric pressure are ever the same at a given altitude. Elevation was also regarded as the cause of this immunity from phthisis. This theory, however, was disproved from the fact that whenever the inhabitants of elevated regions engaged in manufacturing pursuits which confined them in unwholesome air, phthisis was very frequently developed. Nevertheless, this theory so rapidly grew in favor that a large number of phthisical patients were sent to the mountains. These more markedly improved than those who were sent to the milder regions of the southern lowlands. A new series of investigations soon established the fact that this immunity was not due to altitude but to the absence of organic matter in the air of these high elevations. It is now well established that organic substances, whether gaseous products of putrefactive processes, or microscopic germs floating in the atmosphere, when they reach the bronchial tubes in the inspired air, are capable of exciting morbid processes which lead to serious results. It has also been demonstrated that these organic substances are more numerous in the lower than in the higher strata of the atmosphere, and that they continue to diminish the higher we ascend, until a certain height is reached in mountain ascent when they entirely disappear. If irritation of the mucous membrane of the respiratory passages is the primary exciting cause, in a large proportion of the cases of phthisis, may not the purity of the air in these elevated regions be the one all-important restorative agent? When I speak of the purity of the atmosphere, I mean not only its freedom from what are ordinarily called impurities, but its freedom from atmospheric germs. Professor Tyndall has shown by actual experiment that

the air as we ascend becomes freer and freer from these atmospheric germs. His experiments with the sealed flasks were made to prove or disprove the theory of spontaneous generation, but facts are always the same. Professor Tyndall also proved by careful experiment that dust laden air is necessary in order to the production of these living organisms, that it has an effect similar to putrid liquids upon a vegetable infusion, differing only in degree, while vegetable infusions exposed for months to optically pure air remain free from infusorial life, and consequently that germs are diffused through the atmosphere, although the air in different localities may be infected in different degrees. In the presence or absence of these organic substances we have a very important element of difference between the air of the lowlands and the air of the mountains. That atmospheric germs are much more abundant in cities and large towns has also been plainly shown. Dr. Schreider in his lectures on Climatology states that ozone and rain have the power of purifying the atmosphere, that is freeing it from organic substances, that the purifying power of ozone depends upon its oxidizing power; that while oxygen requires a considerable degree of heat before it will combine with other substances, ozone will do so at an ordinary temperature. Ozone destroys the products of decomposition by chemically combining with them. The presence of ozone in the atmosphere is presumptive evidence that it contains no organic substances. The air of the ocean and high mountains is richer in ozone than that of the plains. As has been already said ozone purifies the air of a locality by destroying injurious gases, and by oxidizing decomposing organic substances. It also promotes nutrition and blood changes by supplying to the respiratory organs a most active form of oxygen. Therefore when choosing a health resort for phthisical invalids, we should give the preference to a locality in which there is constantly an excess of ozone in the atmosphere, for experience has established the fact that there the climate is especially salubrious. For some years pulmonary invalids have been recommended to take up their abode in the midst of pine forests. It has been known that they did well amid such surroundings, but "why they did well" has been an unanswered question. The more extensive and primitive the evergreen forests, the better adapted is the climate to phthisical invalids. The turpentine exhaled from these pine or hemlock forests possesses to a greater degree than any other known substance the power of converting the oxygen of the atmosphere into ozone, thus rendering the air of these pine forests very pure, and consequently antagonistic to phthisical development. Experiment has shown that the direct inhalation of ozone has little if any power pre-

venting or arresting phthisical development. We must, therefore, conclude that it is not the action of the ozone upon the respiratory surfaces that renders the climate of localities where it is found in excess especially salubrious, but that by its power of destroying noxious gases and atmospheric germs the atmosphere is rendered so pure that its action is favorable upon the respiratory surfaces of those predisposed to phthisical development.

It has been shown that showers purify the atmosphere. Rain becomes a hygienic agent as, by it, the solid particles are carried to the ground, and the atmosphere is freed from carbonic acid and ammonia. I am aware that this statement is in direct opposition to that of those who claim so much for those climatic resorts, where for weeks and months no rain falls. Doubtless long continued rains affect unfavorably a phthisical invalid, but localities where showers are not infrequent, where there is rain-fall sufficient to cleanse the atmosphere, seems best suited to phthisical invalids. Besides, observation has established the fact that whenever the atmosphere of a locality is dry, there are daily extremes of temperature. During the day, in such places, the sun's heat reaches the earth unimpeded and the maximum heat is high, while during the night the earth's heat unhindered escapes into space, and the maximum temperature is low. Hence the difference between the maximum and minimum temperature is greater where the air is driest.

Undoubtedly, a damp warm as well as a damp cold climate acts unfavorably upon phthisical invalids, but the peculiar dampness which acts most unfavorably is not usually present in those localities where there is the greatest amount of rain-fall, nor is it present because large bodies of water are in close proximity, but it mainly depends upon the nature of the soil. To avoid this dampness the soil should be porous and sandy, a loam soil of sufficient porosity to permit the rapid filtering of water from its surface, so that after a heavy rain-fall the surface will soon become dry. All clay soil drains slowly and imperfectly, and the peculiar dampness arises which acts so unfavorably upon phthisical invalids.

Laennec states that the dampness arising from such a condition of soil is one of the most certain developing causes of phthisis, and he makes mention of a locality having such a soil in which the dampness was so constant and of such a character that more than two-thirds of the resident population died of phthisis. In determining the fitness of a locality as a residence for phthisical invalids, I have come to regard the external configuration and conformation of the soil as of greater importance than the amount of rainfall, or the relative moisture.

Temperature has always been regarded as of very great importance in the climatic treatment

of phthisis. For a long time a warm sedative climate was regarded as the suitable one for phthisical invalids; more recently, it has been claimed that a cold climate is the favorable one, and that phthisical mortality decreases as we go northward.

An extended clinical experience will lead one to accept both views as correct to some extent.

It is not the mean temperature of a locality which is of such importance in retarding phthisical development, but it is the absence of sudden and frequent changes. Whether a cold or warm climate is indicated in any given case, can be determined only by the experience of the individual prior to the phthisical development. Some are greatly depressed by a cold climate and exhilarated by a warm one; with others, the contrary holds true. There is no evidence that temperature has power to favor or arrest phthisical development. At the present time altitude is regarded as of great importance in the climatic treatment of phthisis. While there is no question but that usually the atmosphere 1,500 or 1,800 feet above sea level is purer, containing fewer atmospheric germs than that of the plains; it is equally true that the atmosphere of very many mountain regions is not thus pure, and does not furnish favorable results in its action upon phthisical invalids. For example, experience has shown me no place where phthisical invalids in all stages of the disease do worse than among the Catskill Mountains. Without exception, in those phthisical invalids under my observation who have resorted to this mountain range, the disease has made much more rapid progress than in any other locality. I find similar testimony given by other observers in regard to other mountain regions. We must therefore come to the conclusion that something besides altitude should be sought for in choosing a health resort for phthisical invalids. Much has still to be learned by careful observation and experiment as to the exact nature and limit of the influences which seem to act so beneficially in many mountain regions. As great restorative properties have been claimed for sea air as for mountain air. Migration to the sea shore in search of health is an ancient custom; the mountain exodus is of recent date.

Formerly it was claimed that sea and mountain air differed widely, not only in their effects, but in their composition, and that in mountain regions and by the sea are found the extremes of climate influences. Within the past ten years different analyses have been made of the air of both regions, and their similarity in composition is much greater than their difference. Mountain air differs from sea air in that it is less dense, is of lower temperature, and is less humid. It resembles sea air in containing an excess of ozone, in its freedom from organic substances and from other impurities, and in being cooler and subject to less frequent variations in tem-



perature than is the air of inland plains. For the most part the study of mountain climate has been merely a series of investigations into the physiological effects of diminished atmospheric pressure on the human organism; but these effects vary so greatly in different individuals that any attempt to determine the effect of such pressure is very unsatisfactory in its results. It has been proven by experiment that while a slight diminution in atmospheric pressure exerts no marked deleterious effect upon the human organism, a great diminution, say one-fourth of the ordinary pressure, gives rise to serious disturbances in nutrition, developing a condition which favors rather than retards phthisical development. While we find equal purity in the air of the mountains and the sea, and that the difference in atmospheric pressure has little to do in determining the beneficial or deleterious effect upon the phthisical invalids, clinical experience has demonstrated that, while one class are benefited by sea air, another class do badly at the sea, and improve in the mountains. The question naturally arises, is it possible to determine, without a trial of the region, who shall go to the sea and who shall go to the mountains?

The experiments of Prof. Beneke seem to prove that tissue changes take place more rapidly on or by the sea than in the mountains: if this is the case we may readily arrive at the following conclusions: 1st. That individuals in whom the process of tissue change do not require hastening are better in the mountains than on or by the sea. 2nd. Persons past middle life, in whom phthisis has been developed, do better in sea than in mountain air. 3rd. Phthisical invalids should not go to the mountains unless they are capable of considerable muscular activity. 4th. As a rule, phthisical individuals with an exhausted nervous system, with an overtaxed brain from excessive mental labor, or an all-absorbing occupation, yet who still retain considerable latent muscular power, will improve in the mountains, while those whom processes of tissue change require hastening or stimulating, they being in too feeble a condition to take active muscular exercise, should go to sea.

Sea air is better suited than mountain air to those who cannot bear sudden changes of temperature; while the susceptibility to such changes is greatly lessened by mountain air.

During the past ten years my advice has been given to a large number of persons suffering from pulmonary disease. Under my direction pulmonary invalids have taken up their residence for a longer or shorter time in nearly every well-known health resort on this continent. I have sent but few phthisical invalids to other countries, for within our own boundaries may be found every diversity of climate. From these experiences, without entering into

the details of individual cases, I have reached the following conclusions:

*First*—That we can expect permanent improvement in cases of developed phthisis only after a prolonged residence in the locality which experience has proved to be best suited to each individual case. Permanent favorable results cannot be obtained from an annual change of climate.

*Second*—That cases of *tubercular* phthisis in any stage of the disease grow steadily and rapidly worse in all localities. Such cases do best in the quiet, well-ventilated apartments of their own homes, where they can be surrounded by all those influences and circumstances which tend to make a feeble invalid comfortable.

*Third*—That cases of *fibrous* phthisis in every stage, whether the fibrous process commenced in the pleura or in the bronchial tubes, even after retraction of the chest walls, especially in the infra-clavicular region, is well marked, and the bronchial dilatations which accompany it give the physical sign of extensive cavities, improve and often reach a condition of comparative health, when they take up their residence in regions having very high altitude, such as are found in Colorado and in the Rocky Mountain range. The benefit which asthmatic and emphysematous invalids derive in these regions is most marked. I know of no locality where these classes of pulmonary invalids make such rapid and permanent improvement. Experience has led me to be very cautious in recommending these regions of high altitude to invalids with catarrhal phthisis. In the advanced stage of this form of phthisis, I have never seen good results from a residence in such regions, and it is quite doubtful whether any one in its first stage has received benefit. It is stated by some of the advocates of the Colorado climate, that by it advanced cases of phthisis are greatly benefited, and often reach a condition of apparent recovery. In these favorable cases I would rather the exact nature of the diseased processes than the physical signs had been given, notwithstanding by some so much importance has been attached to the latter. My own experience leads me to believe that only cases of fibrous phthisis are benefited in regions of very high elevation.

Unquestionably, the majority of cases of pulmonary phthisis are of the catarrhal variety, and it is in giving advice as to the climate and locality best suited to this class that the greatest experience and judgment is to be exercised by the medical adviser. One thing seems certain that after the stage of softening and excavation is reached by this class, no climate will long delay the fatal issue. It is during the stage of pulmonary consolidation, or during the period of enfeeblement which precedes consolidation, that we may expect permanent improvement and perhaps final recovery.

I have seen only a very limited number of

cases of catarrhal phthisis permanently improved by long sea voyages or a residence in a warm climate. A large number in the early stage of this disease, going from a northern to a southern winter are temporarily improved: after the first apparently beneficial effects are passed, the degenerative inflammatory processes go on more rapidly than before. The invalids whom I have found to be most markedly benefited by a sojourn during the winter months in a southern climate are those convalescing from some acute pulmonary affection, in whom the delayed convalescence raises the fear of possible phthisical development, and those in whom acquired or hereditary phthisical tendencies exist, yet there may be no positive physical signs of disease of the lungs. The list of such cases is a long one, and the results obtained are most satisfactory. My favorite resorts for such cases are Aiken in South Carolina, Pilatka, Enterprise and Gainsville in Florida, and Thomasville in Georgia. My best results in the stage of consolidation of the catarrhal form of phthisis have been reached in those who have made a prolonged stay (varying from one year to three years) in mountain regions with an elevation of from 1,500 to 2,000 feet. Of such regions the most positive and permanent beneficial results have been obtained in Ashville, N. C., and in the Adirondack region in this State.

I am led to believe that persons suffering from catarrhal phthisis do well at a higher elevation than 2,500 feet, and also that some regions with a much lower elevation afford all the necessary climatic conditions for this class of cases.

The mode of life which those suffering from phthisis should adopt is important. The general direction given is, "Live in the open air," but few of those who give or receive this advice appreciate its full meaning. My own personal experience, as well as my experience in regard to its effects upon others, leads me to believe that a camp life, or a tent life during the warm season, in such localities as have already been indicated, is of the greatest service in arresting and curing phthisis in those who are not enfeebled. If this kind of life is not practicable, or the invalid's condition renders it hazardous, then spending the day in the open air in pleasurable excursions should be encouraged, even in the feeble.

#### BURNS AND SCALDS.

The Alkaline Treatment—Its History. By GEO. F. WATERS, Discoverer of this Treatment.

Whilst reading a summary from Holmes' Manual of Surgery upon the treatment of burns and scalds, published in the *Boston Journal of Chemistry* for November, 1876, the idea occurred to me that there was something of importance known about burns and scalds, not included in

that summary, which ought to be made public. These are the facts which came to my mind: In 1837 I saw a little sister, too young to talk, scalded with a solution of bicarbonate of potassa. A half pint of the solution flowed over her neck and chest. The water had just been poured from the kettle in an active state of ebullition, and before the kettle could be set down the little girl had done the work. To tear off her clothing was but the work of a moment, and the scalded surface was then covered for a short time with a cool calico apron. In two minutes she had stopped crying, and, looking into her mother's eyes, began to laugh. My mother thought it hysterical, and expected to see her soon go into convulsions. She made all haste to dress the surface with sweet oil and laudanum, with cotton batting over all; but the surface blistered before she could finish dressing it, the vesicles being quite small and near together. The next morning all signs of a burn were gone, except little white patches of desquamation where the bullæ had been. There seemed to be no soreness, and there was no after-trouble. So far as I know, there was at this time no thought of ascribing the wonderful cure to the saleratus in the water, and yet my mother might have had such an idea. A story which she told at that time, of an old horse wounded in the side and turned out to take his chance of cure without care, would seem to imply as much. This is the story: a potash-factory was by the side of a pasture, and the horse would frequently go to the heap of leached ashes and nibble them. One of the workmen, disgusted at the sight of the gaping wound all alive with the larvæ of flies, dashed a ladle of hot lye into the wound, starting the horse and destroying the parasites; and the horse was in a few days cured of his wound and taste for leached ashes. This is really the first case of alkaline treatment—occurring as it did in my mother's girlhood—of which I have heard.

The next case which came under my notice was in 1860. My oldest daughter, then in her fourth year, was accidentally crowded against a hot stove, by which her arm was burned from wrist to elbow, the embossing of the stove burning in deeply. Soap-suds was first applied to the arm, and gave relief, and as soon as it could be prepared, the "the linimentum ex aqua calcis" was used to dress it with. The emulsion was made with olive oil. It was quite bland and soothing. (The odor is not quite so bearable as that of the carron oil, linseed oil, and lime-water.) She made no complaint, and had quite a quick recovery.

The next case was in 1865. I had opened a large three case Roberts' vulcanizer hastily, the thermometer, when I began, indicating temperature of 320° Fahr. Violent ebullition soon cooled down the water to 212° Fahr., but the upper part of the vulcanizer was very much

above that temperature. Wishing to cool down my case as soon as possible, I grasped the flange of the vulcanizer on either side with my hands—using woolen pads in so doing; but, as I started for the sink to empty out the hot water, my left hand slipped its hold and that part of the vulcanizer dropping brought my hand into the scalding steam. That the cool air might keep the steam away from it, I at once lifted the vulcanizer and at the same time tried to recover the lost hold of the left hand. I succeeded, but in doing so I got about five deciliters of water, in a violent state of ebullition, on my wrist and into my sleeve. My training in the medical laboratory had taught me to keep cool in accidents, but, though I kept my muscles under control, I could not keep my arm cool: so, whilst my assistant stood aghast, I set down the vulcanizer, took off my coat, unbuttoned my sleeve and lifted it up from the arm, which was red as a boiled lobster. Behind me, and within reach, was a case of drawers, one of which contained a good supply of bicarbonate of soda. As soon as I felt the hot water upon my arm the whole case of my sister's scald came vividly to my mind, and the thought with it that it was bicarbonate of potassa which saved her. I had no bicarbonate of potassa at hand, but I had soda bicarb., and without a second's hesitation I thrust my right hand into the cool soda, and felt a relief there; withdrawing it with a handful of soda I lightly rubbed with it the left arm and wrist wherever it burned. I then buttoned my sleeve again, although it was still wet and warm, and took up the vulcanizer and went on with my work; the whole detention was less than two minutes. When my assistant found his mouth, he said, "You'll be laid up three weeks with that." But it did not give me a moment's uneasiness thereafter.

The next case was in 1875, when I burned the inside of my left hand with a metallic die, the temperature of which was very much above boiling water. The skin was scorched and contracted. I was standing near my sink, and at once took up a cake of bichlorate of soda soap, dipped it in water, and applied it to my hand. It gave me relief in less than a minute, and the relief was permanent.

When I read the article in the *Journal of Chemistry* all of the above cases came, as I have said, to mind, and I at once thought that there must be reasons for the pain in a burn other than the proximity of the air, and that the philosophy of the cure was in some way connected with the action of the alkalies. Experiment (on my own person) showed me that of all the alkalies bicarbonate of soda was the quickest and best and lime the slowest and poorest in action, potassa being between the two. Nature places them in their appropriate places in their animal system. Thus, take a cross section of any limb, and we find the bone

(lime compound) central, surrounded by muscles (potash compounds), and the skin external, with its albumen associated with soda. During the winter of 1876 I made a study of the human saliva as found in the mouths of my patients, on the microscopic stage, with polarized light. There I found the lime compounds of a solution to first appear in a crystalline zone, followed by potash and stronger (acid) soda salts, as chloride and sulphides, etc., the bicarbonate of soda being the last to put in an appearance, and the whole mass on the slide seeming perfectly dry before a crystal of the bicarbonate of soda was seen. Thus bicarbonate of soda is shown to be in a fluid condition with a minimum amount of water, and bicarbonate and phosphate of lime to require a maximum amount. Here the microscope explains the philosophy of the position of the alkalies and alkaloids in the living body, as well as why bicarbonate of soda is the proper alkali to apply to the skin for any purpose. As we investigate we always find albumen in association with bicarbonate of soda, or soda in some form, showing them free yet constant lovers.

In the winter of 1870 the late Dr. N. C. Keep recommended me to use for my eyes, which were suffering from overwork, the vapor of *bi-sulphid of carbon*. To apply it by means of an eye-wash bottle, holding the bottle by one hand so as to warm it, and thus to vaporize the bi-sulphide. In using it I found that as soon as the vapor began to form there was a sharp pricking sensation in the surface of the sclerotic coat exposed to its action, and that this surface soon began to show signs of inflammation, the small blood-vessels enlarging and carrying red blood. A natural desire to know the philosophy of its action led to a course of experiments, in which it was conclusively shown that the pricking was caused by the vapor entering the minute pores, arresting and severing the natural course of the flow of the contents, thus pressing upon the adjacent nerves, and continued pressure, causing continued back-action allowed the red blood disks to glide into the enlarged vessels. Applied to the skin, I found that it, and also chloroform and ether (sulph.), would produce all of the phenomena of a scald, even to vesication, if continued long enough.

Cold applied to the skin may produce the same phenomena. The volatile hydro-carbons produce their effects by pressure applied to the mouths of the pores, penetrating them and causing them to dilate and *press upon the contiguous nerves, thus producing pain*. Cold crystallizes the contents of the pores, and thus obstructing them produces its effects. Heat contracts albumen, hardens, stiffens, and thus closes the pores and produces pressure upon the nerves. The application of bicarbonate of soda gives its quick relief by dissolving or softening the albumen in or surrounding the

pores, and, allowing the restrained contents to escape, relieves the pressure. That the pain is due to pressure is shown also by the fact that position is all important in giving relief. Thus, a man came to me who had burned his hand with melted sulphur. He had scraped off the sulphur and washed with soap, and came with his hand in a wet towel, suffering intensely. By urging I got him to stand still while I placed a half dozen grains of soda bicarbonate in his open palm; a drop of water added made a stiff paste, which at once removed the pain. Holding his hand up to the light, and gazing at it with looks of astonishment, he exclaimed, "By golly, I don't see how he does that." But as he turned to leave my office, and took hold of the door-knob to open it, he suddenly turned, exclaiming "It has all come back again." I explained to him my theory of pressure, and directed him to so poise the limb as to let the blood gravitate toward the heart. He had no more pain. Many other cases have come to me of a like nature, showing the same fact, and in the last (May) number of the *Boston Journal of Chemistry* they say we have met with only one unfavorable report concerning the new remedy. Dr. R. P. Oglesby states the case of his child in *The Doctor*. It seems that the child's hand was scalded by the steam from a kettle. The hand was treated by "placing it in a solution for nearly ten minutes." Now the position of the limb in this case was such that not only could no relief come, but even the blood-vessels would be dilated so as to make a pressure that would not quickly be relieved upon the limb being properly posed; but brought to a proper position for relief by gravitation, and having the contracting power of cold applied, it would have ceased to give pain in less than ten minutes, and I do not see why ten seconds would not have sufficed. (See the *Journal*, page 130.)

I had arrived at the conclusion that pressure was the cause of the pain, about the last of January, 1877. I now began a search through medical books and among friends to see if I had been working on old ground. I could find nothing that even hinted at my conclusions. It did not occur to me to ask Dr. White, although I frequently saw him at the meetings of the Boston Society of Natural History. In April I met Dr. William F. Channing, of Providence, and gave him, quite briefly, the results of my studies on the treatment of burns and scalds. He at once said that it was all new to him, and advised me to publish or make known the results of my investigations, as they were of too much importance to be allowed to repose in the possession of one or of a dozen persons. So I resolved to publish, as soon as an opportune moment arrived, which soon came at a meeting, in Salem, of the Massachusetts Dental Society. My essay was unwritten, and was delivered in the institute

building on the 8th of June, 1877. Before eight o'clock on the morning of the 9th of June, a woman in this city read the report of the essay as printed in the *Boston Daily Advertiser*, and in half an hour had a chance to try the cure. She was taking lemon-pies from the oven, a pie slipped from her hands, she sprang to save it, hit the edge of the plate in such a way that the pie was turned over upon her hands hot from the oven, bottom up; she turned it on the table, saved her pie, then quickly washing off the sticky stuff applied the bicarbonate of soda, which, as her good fortune ruled, was at hand on the table. It gave her immediate relief. She told a friend, who came to me with the story, that she could see the fire leave. No unpleasant results followed. Many such cases are constantly coming to my knowledge. I will close with a case of scalding with soap, which occurred in Concord, Massachusetts:

Mr. Cyrus Hapgood (then twenty years old, now sixty) was at work alone in a soap factory making hard soap, using barilla with bleached-ashes lye. A sudden increase of heat caused the soap to boil over. He had on a coarse cotton shirt, open in front, with a button six or eight inches down from the neck. The top of the kettle was about breast high, and when the soap came over, a quart or more flowed into his bosom. He says the pain was awful, but he could not stop; he just leaned forward for a few moments and held his shirt off till it cooled a little, and then he went on with his work saving the soap, which was now done. At night he took off his shirt and soap and washed up; there was no soreness of the skin where the soap had been, and he suffered nothing from the soapscald after it got cool. This was a year or so subsequent to my sister's scald. Mr. H. gave me the history of his case Sunday, May 12, 1878.

My treatment is to apply to the burned surface bicarbonate of soda in fine powder, if it is a wet surface; but if it is a dry burn, use a paste of bicarbonate of soda and water, or a strong solution of the bicarbonate of soda in water and apply to the burned surface. This relieves sunburns as well as burns from hot coals, melted sulphur, hot iron, steam, etc.

N.B.—Always dispose the burned surface so that the blood can gravitate toward the heart if possible, as otherwise a continuous pain may be felt, due to the dilation of the blood-vessels from the weight of the contained blood.

If bicarbonate of soda is not at hand, bicarbonate of potash is the next best; biborate of soda does as well, but is not often found handy. Then the emulsion of limewater with oil makes a good dressing where the skin is broken. But vaseline is preferable, as there is no odor from it, and it is quite as bland.—*Louisville Medical News*.

## ON SYMPATHETIC OPHTHALMIA.

A CLINICAL LECTURE DELIVERED AT THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK.

By D. B. ST. JOHN ROOSA, M.D.

PROFESSOR OF OPHTHALMOLOGY,

(Reported for the *Medical Record*.)

Sympathetic Ophthalmia—Atrophy of the Optic Nerve—Causes of the Atrophy—Traumatism—Tobacco and Rum—Syphilis—Exposure to Bright Light, etc., etc.—Symptetic Inflammation of the Uveal Tract—Treatment.

GENTLEMEN,—I will to-day interrupt the regular order of study for the purpose of showing you an important case.

Last week, you will recollect, I lectured upon the methods of examining the eye. We shall now bring into requisition some of the knowledge then obtained, and endeavor to find out, if possible, from external examination, what the affection is which causes this man to be blind. The history of his case is as follows:—

He is forty-five years of age, and a farmer. When fourteen years old he was one day holding a board, through which his father was attempting to drive a nail; the nail glanced and struck him in the left eye. On account of the injury thus received he remained in the house about ten days, and during that time he was unable to see with the injured eye. It is fair to suppose that considerable inflammation occurred. At the close of the inflammatory action he had only perception of light from the injured eye, and it was limited to one part of the retina: light could be perceived only when he looked in a certain direction. Subsequently he attended school as usual, was able to read and write, etc., with the uninjured eye, without inconvenience, and since reaching manhood he has been able to see with his right eye sufficiently well to transact with ease all business incident to his occupation.

About three or four years ago he first observed that he was not able to see so well in the night as in the daytime. That fact showed that the perceptive power of the retina was blunted. The man found greater difficulty in seeing in the night, simply because there was not sufficient light. The perceptive power of the retina, or the conducting power of the optic nerve-fibres, was so lessened that they could not do their work unless they were exposed to more than the ordinary quantity of light.

Some eight or ten months ago he first began to notice that he had difficulty in seeing to read and write, and he now comes to us almost entirely blind. He can, in fact, as you see by the tests, only distinguish light from darkness. Here, then, is a healthy man, who, a certain number of years ago, received an injury of the left eye that destroyed its sight. Three or four years ago he first noticed failure in the sight of the right eye, and that failure made its appearance and progressed without pain. The suspicion then at this stage of the examination is aroused, since there is no history of injury of this

eye, that he is suffering from *sympathetic disease* of the right eye.

In the next place, we wish to know what the condition of the left eye is. As we look upon it we see that the eyeball is smaller than the right, and that it is also flattened; the cornea is opaque, and is smaller than in the right eye; the conjunctiva of the lid is very vascular, and so also is that which is upon the eye-ball. The eye is irregular in shape, and has undergone such changes in its interior that it has become folded or wrinkled, exactly in the same manner as if my handkerchief was made into the shape of a ball-cover and was filled with a tenacious fluid. As long as the handkerchief is filled completely it will form a complete globe; but if by any means a portion of the fluid is made to disappear, the cover becomes wrinkled. This is what has happened to the left eyeball of our friend: some change has occurred in the interior which has so affected the coats of the eyeball as to give to it this external appearance. Besides this, the cornea is opaque and has a scar upon it.

Let us next see what we can discover by an external examination of the right eye. First, we notice that the cornea is perfectly transparent; the iris and the conjunctiva are sound. There is no evidence whatever of disease in the external portions of the right eye.

[Before this statement had been made by the lecturer, three of the class had been called upon to give an opinion as to the appearance of the outer part of the eye. Two of them pronounced the cornea and iris to be diseased, while the third formed a correct estimate of their appearance.]

You observe, gentlemen, that some of you had put yourselves in such a prejudiced frame of mind that you were unable to give a correct opinion, although I asked you to compare the appearance of this man's cornea and iris with my own, in neither of which is there disease. Before you examined the case you believed there was disease in the outer parts, and hence you found it. To cease to form opinions before a case is thoroughly examined, is one of the most difficult things in the investigation of disease. It is, however, an essential to him who would be an intelligent and skilful practitioner. Although the suspicion of sympathetic disease was excited by the history, the objective examination affords us no evidence, or at least none of the usual evidence of such disease. There is no lachrymation, no photophobia, no iritis. These are the usual marks of a sympathetic ophthalmia; but here is a quiet eye, and one without history of inflammation.

The patient cannot count the fingers on my hand; he cannot even see my hand, although he makes an effort, and he thinks he can. The disposition of the human patient to exaggerate his visual power is as marked as that of the consumptive to say that he is "now going to get well." Gentlemen, you will need all your power of objective observation to prevent you from accepting the patient's statement instead of the results of your own examination. Patients who are entirely unable to see fingers, or even a hand, will



insist that they are able to see both. They hold up their own hands, of course knowing that they are doing so, and then imagine that they see them. When the right eye is examined by placing a lighted lamp in front of it, you see that he has quantitative perception of light—that is, he can tell light from darkness—but he has no qualitative perception of light. He is unable to see even very large objects by any light.

What has brought our friend to this condition? If we had lived in the olden time, our investigation would at this point cease. But we are now able to go farther, and to determine what the nature of the affection is that I have just given the general name of sympathetic disease. This is done by means of the ophthalmoscope. An ophthalmoscopic examination has already been made, and to as many of you as is possible will be given the opportunity by Dr. Ely, of observing the change which has occurred in the interior of the eye. The examination has revealed atrophy of the terminal extremity of the optic nerve. As seen by the ophthalmoscope, in this case the optic papilla, or optic disk, is very white; it is excavated, and it has scarcely any capillaries. These are the signs of atrophy of the optic nerve, and are to be appreciated only by the use of the ophthalmoscope. As far as can be determined, the remaining portions of the eye are perfectly healthy. Here then, is a condition which explains this man's blindness: the fibres of the optic nerve which supply the retina have undergone atrophy.

#### CAUSES OF ATROPHY OF THE OPTIC NERVE.

The question now arises, what has caused the atrophy of the optic nerve in this case? Atrophy of the optic nerve arises from a large variety of causes.

If a soldier in battle receives a *gunshot wound* through his orbit, cutting off the trunk of the optic nerve, atrophy will of course follow.

Again, a man may use *tobacco* and *rum* to such an excess as to give rise to an insidious inflammation, that may be followed by atrophy. The neuritis in this case is perhaps excited by blood-poisoning.

A man may be exposed to a *bright light*, such as the exposure received by roofers, which so affects the eye as to develop a neuritis that will be followed by atrophy.

A man may have *syphilis*, and, in consequence of the destruction of the nutritive qualities of the blood produced by that disease, an optic neuritis may be developed which is liable to be followed by atrophy.

There are many cases of atrophy of the optic nerve, however, which have been developed apparently without cause. That is, with our present knowledge and means of investigation, we are not able to find the cause. Anything, however, which can produce neuritis—for example, meningitis extending along the sheath of the optic nerve to the nerve itself—may be followed by atrophy.

*Prolonged or sudden anæmia* may deprive the trunk of the optic nerve of the requisite amount of nutrition, and atrophy may follow. *Concussion of the*

*brain* may be followed by atrophy of the optic nerve, and probably of the acoustic nerve.

But we come back to the question, what has caused the atrophy of the optic nerve in this case? We can only say it is probably a *sympathetic trouble*. This is not saying very much, but it is because of our lack of knowledge that we use such a general term. There is a doubt in many minds whether an inflammation of the optic nerve is ever a sympathetic trouble. Such authorities would say that the atrophy in this case is not sympathetic—not dependent upon disease of the fellow eye, but that it is a mere coincidence that it has occurred in this case. Sympathetic disease with them is always an irido-choroiditis. I think the evidence is rather against this view. I am inclined to believe that atrophy of the optic nerve may be one form, although a rare one, of sympathetic ophthalmia.

We know that the optic nerve does not transmit sympathetic trouble, because the optic nerve of the affected eye has been divided in cases of injury, thus "put out of play," as the Germans say, and yet inflammation has extended to the other eye. Sympathetic inflammation probably extends through the nerves which supply the ciliary region coming from the fifth pair and the sympathetic. We know that inflammation is propagated through these nerves, because injuries in the ciliary region, such as wounds, presence of foreign bodies, cicatricial contractions, are very commonly—indeed, I might say almost invariably—followed by sympathetic inflammation; whereas injuries of the eye not involving the ciliary region are not nearly so apt to be followed by such inflammation.

I am not to be understood as saying positively that this is beyond all question a sympathetic condition, for sympathetic neuro-retinitis, followed by atrophy, is, as I have already said, rare.

#### SYMPATHETIC INFLAMMATION OF THE UVEAL TRACT.

Another, and much more common form of sympathetic trouble, is inflammation of the iris, inflammation of the choroid, and inflammation of the ciliary body—in other words, inflammation of what is called the *uveal tract*. The iris, the choroid, and the ciliary body constitute what is known as the uveal tract, and you will please remember that this is the great nutrient portion of the eyeball.

The nutrition of the optic nerve in the right eye in this case has been affected, probably in consequence of the propagation of ciliary irritation from the other eye. It is in this manner, probably, that this man's blindness has been produced.

What can we do for him? But very little. The atrophy has occurred; the tissue is destroyed; the capillaries do not exist; the nutrition of the optic nerve has been removed. The prospect for giving this man vision is exceedingly slight. It would be a perfectly justifiable operation to remove what remains of the left eyeball, which is, perhaps, a slight source of irritation to the other eye; yet I cannot promise

that he will recover any sight as a result of the operation, or even retain what he has.

I should think that, perhaps the chances of improving the sight of the right eye by removal of the left were about one in ten thousand. I am unable to see how changes can occur in this optic nerve that will allow it again to communicate luminous impressions. This is not an operation which, under these circumstances, the surgeon should urge, but a plain, truthful statement should be made to the patient, and then he should be allowed to make his own decision. Were I in this man's situation, I should take the trifling chance which the operation offers, and submit to its performance. I have seen cases, in which atrophy of the optic nerve had advanced to such an extent that scarcely any capillaries existed, so much improved by the use of strychnia, that capillaries again appeared upon its surface. I have seen such cases in my own and in the practice of other gentlemen. If, therefore, I should remove this eyeball, strychnia would enter into the subsequent treatment of the case.

How would the case be altered, had the patient more perception of light, if there were lachrymation, and inflammation of the iris and the choroid? Then I should urge the operation; and if the patient was a minor, and I was responsible, I should put him to sleep and have the eye removed, whether he was willing or not.

If he had sympathetic irritation, manifest by lachrymation and what is commonly known as weakness of the eyes when they are called upon to work, I should be even more urgent regarding the removal of the eyeball, and should feel quite safe in promising him that he would fully recover his sight; but when the inflammatory process has become established, I should be very guarded in an opinion given with reference to the ultimate results of the operation, for you are not at all certain that you will cut off the inflammation.

Thus, gentlemen, you see the importance of a case in which injury has been done to an eye by a foreign body. If a foreign body enters the eye, every reasonable attempt should be made to remove it; but if such efforts fail, the eyeball should be enucleated. You are not to allow a person with inflammation of the eyeball from injury, or from the presence of a foreign body, to go from your observation with a weeping eye upon the opposite side. Such cases are serious, and you should give the eyes of such persons the most exact examination, and determine whether or not there is any failure of vision. As long as there is merely lachrymation, as long as there is no inflammation you may hope by removing the affected eye to save the other.

As soon as sympathetic irritation occurs, immediately remove the eyeball which has been injured. That should have been done in our friend's case, but he has been unwilling to admit that his sight was failing, and now all that remains for him is to decide whether or not he will take the very slight chance offered him by an operation.

[The patient decided not to have the operation performed.]

## THE CANADA MEDICAL RECORD

*A Monthly Journal of Medicine and Science.*

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D.L.R.C.P., LOND

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### TO SUBSCRIBERS.

Attention is directed to the fact that our next issue will be the last number of Volume Six. All subscribers to obtain the RECORD at two dollars a year must pay previous to the publication of the first number of Volume Seven; after the issue of that number, three dollars will be charged. The late appearance of the present number is due to the Editor's absence from the city.

### COLLEGE OF PHYSICIANS AND SURGEONS.

*Province of Quebec.*

The Governors of the College will hold their Semi-Annual Meeting in the City of Quebec on the 25th of September. The Board for Preliminary examination will meet at Laval University in Quebec the week previous.

### THE NEW BOARD OF HEALTH.

Montreal has at last got a Board of Health, and we hope for vigorous work. Small-pox still maintains its hold among the deluded non-vaccination advocates. Charges of mismanagement in connection with the Civic Small-pox Hospital have been made by a Medical member of this Board (Dr. Kennedy,) which we hope will be thoroughly sifted.

The various Medical Schools in Montreal open October 1st. The introductory lecture of Bishop's College Faculty of Medicine will be delivered in the large hall of the Natural History Society by Professor J. Baker Edwards.

### MEDICAL CANDIDATES.

The din of political thunder is to be heard from one end of the Dominion to the other in anticipation of the general elections, which take place on the 17th September. If all the Medical candidates who are soliciting the suffrages of the free and independent electors are successful, our profession will have its share of representation.

### BIRTH.

At St. Etienne, Beauharnois County, on the 19th of July, the wife of J. Lemieux, C.M., M.D., of a daughter.

## Pharmaceutical Department.

A. H. KOLLMYER, M.A., M.D., Editor.

### A PHARMACEUTICAL OLLA PODRIDA.

By HENRY R. GRAY, MONTREAL.

It has frequently been stated by retrogressionists that the separation of the business of apothecary and physician is a modern innovation. This is evidently an error, for we are told that Aristotle, who lived four hundred years before Christ, served for some time in a drug establishment and herb store in Athens. Previous to the fourth century the distinction was not very apparent, as one man frequently practised both professions, as in the case of Galen, who kept a drug store in Rome.\*

As early as the eighth century, according to a paper on the name apothecary, by Bartlett Patten, schools were established at Alexandria and Salerno, and the art of the apothecary and herbalist was taught, independently of medicine. Later we have the evidence of Sir Thomas Elyot, who says:—"And, therefore, happy is he which in sickness fyndeth a discrete and well-learned physition, and so true an apothecary that hath always drouges uncorrupted." In Wood's *Athene Oxoniensis* the following paragraph occurs: "A detection of the daily enormities and abuses committed in physic, concerning the three parts thereof, that is, of the physician's part, the part of the surgeon, and the part of the pothecaries." Several other old writers speak of the apothecary being the culler and preparer of simples and Galenicals, and the physician the employer thereof. The carefully-arranged drug shop, unearthed at Pompeii, speaks for itself.

The name apothecary has now almost fallen into disuse, and the distinction between the physician and the modern apothecary is being more sharply defined every day. What the coming name of the modern apothecary will eventually be no man can predict, in view of the many diverse ones at present employed.

The first change in advance took place in

\* The earliest record which we possess concerning the existence of apothecaries, may be found in Exodus, chap. 30, and verses 23, 24, 25, which read as follows:—"Take thou also unto thee principal spices, of pure myrrh five hundred shekels, and of sweet cinnamon half so much, even two hundred and fifty shekels; and sweet calamus, two hundred and fifty shekels.—And of cassia five hundred shekels, after the shekel of the sanctuary, and of olive oil an hin.

"And thou shalt make it an oil of holy ointment, an ointment compound after the art of the apothecary."

And, again, in verses 34 and 35, we have another prescription:—

"Take unto thee sweet spices, stacte and onycha, and galbanum, these sweet spices with pure frankincense; of each shall there be a like weight.

"And thou shalt make it a perfume, a confection after art of the apothecary, &c." B.C. 1500

It is also worthy of note to study the terms here used in these ancient prescriptions, as they are identical with those employed in modern times.—(*Ed. of the RECORD.*)

France, and "pharmacien" soon usurped the ancient and time-honored name of "apothicaire." In 1839, Mr. Blair, of Philadelphia, according to a recent paper on the subject, devised the name "pharmaceutist," and displayed it at full length upon his sign. Few followed Mr. Blair's example, until, at length, the College of Apothecaries concluded to change its name to the Philadelphia College of Pharmacy. Pharmaceutical chemist is the title gained by the highest graduates of the Pharmaceutical Society of Great Britain. It is now conceded that the simple word pharmacist describes concisely, and with sufficient accuracy, the occupation of the modern apothecary, and it will be a matter of regret if this name does not eventually come into general use.

The relative position of the pharmacist and physician, in this country at least, can hardly be said to be in as settled a condition as one could desire. Usually from the same social position in life, the rudimentary education of each is about equal, and, if it were not for the implied or fancied antagonism of their occupations, they would be the best of friends, and it is a matter of regret in the interest of both professions that a better *entente* does not exist to their mutual advantage.

The two causes which seem to militate against a closer intimacy and confidence, appear to be, that the physician is continually infringing on the specific duty of the pharmacist, and the pharmacist does the same to the physician. The former by preparing his own medicines, or entering into degrading alliances with individual pharmacists, and the latter by giving advice to patients in cases which ought to be under the physician's care.

It has been frequently remarked that a physician practising in a town of more than 5,000 inhabitants cannot afford the time necessary to supply medicines, without infringing on the time required for the proper study of his cases, and the reading of the periodical medical literature of the day, with which the table of every progressive physician should be abundantly supplied. It is, therefore, to the best interest of the medical man to encourage the establishment of well-conducted pharmacies, not only in his own immediate neighborhood, but also in different parts of the town or city in which he resides.

The pharmacist on his part will find that it does not pay to infringe on the rights of the physician, neither is it honorable so to do. A pharmacist doing a fair business soon finds that to talk to a patient for fifteen or twenty minutes, giving advice as to diet and other matters, with a bottle of medicine into the bargain, which latter the patient only expects to pay for, is a very tedious and troublesome way of earning a precarious livelihood, to say nothing of the bad feeling engendered against him among the neighboring doctors.

Let each profession zealously strive to raise the standard of its own body, and let the motto be in healthy rivalry "Excelsior!"

Pharmaceutical education has been very thorough on the Continent of Europe for a long time, and in England recent laws have made the attaining of a license to practice pharmacy quite a difficult matter, dependent on a long course of study, with practical work in the laboratory and behind the counter. In the United States the pharmacists as a body are fully alive to the necessity for stringent legislation, and in some states restrictive enactments have become law. In Canada, three provinces, namely, Ontario, Quebec, and Nova Scotia have Pharmacy Acts, which are rigidly enforced. The Quebec Act is the most stringent, inasmuch as it exacts a curriculum of study in addition to practical experience behind the retail drug counter. While, however, advocating the necessity of a scientific training for the pharmacist, it must not be forgotten that he is practically obliged to sell, in order to make his business remunerative, a vast number of articles which any ordinary person, with little or no education, could as easily do. The advance in rational medicine, so little understood as yet in this country, has discontinued the use of many remedial agents, and has greatly limited the rather too liberal administration of drugs which marked an era now, happily for the public, almost passed away. Any pharmacist of ordinary perspicuity cannot fail to have noticed that the most highly educated physicians use the fewest and simplest drugs. The consequence of this change is a decrease in the returns of the pharmacist; formerly a highly remunerative occupation, it is now most difficult in cities where expenses are high to make a respectable living, consequently the pharmacist is driven to enter into competition with mercantile men to earn in trade what his own art, *professionally conducted*, refuses him; hence the vast increase of patent medicines, articles de toilette, confectionery, soda water, artificial flowers, and many other things found in so many of our best pharmacies to-day.

"It is not all gold that glitters" is a saying very applicable to the modern apothecary, one half of whose modest capital is usually, to keep pace with the times, spent in plate-glass and gilding, and whose balance, when salaries, rent, and taxes are paid, is too frequently on the wrong side of the ledger.

#### BLACK HAW.

BY H. ROSSER, MONTREAL.  
*Viburnum Prunifolium.*

This shrub or tree, known also by the name of sloe, is found very abundant throughout the Middle and Southern States, growing to the height of from ten to twelve feet. It flowers from March to June, and at this season presents

a handsome appearance. The bark of the root, stems and branches are medicinal, that of the root being preferred. It is fawn-colored, with a feeble odor and a very bitter astringent and aromatic taste. It contains extractive matter, tannin, gallic acid and a peculiar resinous principle for which the name *viburnin* has been proposed. Black Haw is tonic, astringent, diuretic and alterative, and has been used internally in chronic diarrhœa, dysentery and palpitation of the heart. It appears to exert an especial tonic influence upon the uterus, and is highly recommended in cases of threatened abortion and as a preventive in cases of habitual miscarriage. In the latter case its use should be commenced a week or two previous to the aborting period, and continued during the remaining period of pregnancy. Dr. Phares of Mississippi considers it to completely neutralize the effect of cotton root bark when used for the purpose of abortion. The decoction has been used as a gargle in aphthæ, and as a wash to indolent ulcers. The dose of the powdered bark of the root is from half to two drachms. The most convenient form for administering is the fluid extract, the dose of which is the same as the powder.

To the Editor of the Pharmaceutical Department CANADA  
MEDICAL RECORD.

DEAR SIR,—In the annual report of the Pharmaceutical Association of the Province of Quebec, published in the MEDICAL RECORD of last month, it may be observed that the retiring council recommend the new one about to be elected to endeavor to secure by Act of Parliament certain amendments to the present Act, by which they will acquire more power as a licensing body. Among other items suggested as desirable is, that all physicians keeping drug stores in this province shall be compelled to take licences authorizing them so to do from the Pharmaceutical Association of the Province of Quebec.

Now this is what may be regarded as an endeavor to introduce the thin edge of the wedge; how much further it may or can be driven remains yet to be seen. Perhaps, as in accordance with the laws of that Association, students in medicine will not be allowed to serve or do duty in these doctors' drug stores until they have passed examinations, first as apprentices and secondly as qualified assistants, before the Examining Board of the Pharmaceutical Association. Again, perhaps, the apothecaries of our hospitals, convents, dispensaries, and other charitable institutions will also be compelled to qualify before the same Board:—indeed the question may even be raised whether physicians or surgeons are competent to dispense their own medicines, since they have not yet received licenses from what desires to be the only licensing body in this province.

It can hardly be expected that the members of the Medical profession in this province will

quietly submit to any such legislation as this, which would at once deprive them of much of their usefulness as well as of part of their just and hitherto fully recognized rights and privileges.

If we glance back at the history of the drug business in this province, we will find that the first drug stores were for the most part opened and superintended by regular practitioners, and it is not much more than 50 years since, that these were the leading stores both in Montreal and in Quebec. Gradually, however, as the population increased, the medical man's time became more valuable, and he was compelled to devote the whole of it to his practice, and leave trade and dispensing to others who felt more disposed to devote their energies in that direction. The number of medical pharmacists thus gradually decreased, while the pharmacists proper have increased to such an extent, that within the last few years they applied for and obtained full powers to educate, examine and license their own members. Previous to this all pharmacists had to pass their examinations, qualifying them to practice their art as druggists in their own right, before a board composed of *medical men* appointed by Government; the amount of study required by each candidate, the period of apprenticeship and all other qualifications being altogether under the control of that board of *medical men*, which was then called the College of Physicians and Surgeons of Lower Canada. For sundry and justifiable reasons, unnecessary to mention here, the druggists desired to have all these powers invested in themselves. They accordingly formed themselves into the Pharmaceutical Association, applied to Parliament, and unopposed by the medical profession, who, for the most part, supported their views, obtained what they sought.

Now, however, not content with having obtained all they petitioned for, they seek for more power, power by which they may oppress and deprive of one of their just rights that very profession which has always sought only their good, while jealously guarding at the same time the public welfare and interests. Physicians have always had the right in Canada to open pharmacies if they see fit to do so, and to place in them students on whom they can rely, to dispense, if they wish. The student, on the one hand, has already proved before the College of Physicians and Surgeons of the Province of Quebec, before he becomes a medical student, *i. e.* when he passes his classical examination, that his education is such that he can be entrusted with a Latin prescription, and the medical man on the other has also proved before the same board that he is fully qualified not only to prescribe but also to dispense.

The present College of Physicians and Surgeons of the Province of Quebec have yet the power to grant such licenses to medical men, students and midwives; and though it has

yielded to the solicitations of the pharmacists in so much as to leave the education and licensing of members of that body to themselves, it will not by any means allow them to deprive it of its just prerogatives. Let the druggists therefore be content with the powers they have procured, and let the medical profession take care of themselves.

I am, Sir,

Yours respectfully,  
MEDICUS.

#### HINTS ABOUT PATENT MEDICINES.

To the Editor of the *Pharmaceutical Department CANADA MEDICAL RECORD.*

SIR,—Colleges of Pharmacy for the training of young chemists having become permanently established in Canada, it becomes a duty to bring to the notice of the public how carelessly Patent Medicines are manufactured, by persons not having the necessary qualifications, and sold throughout the country, also the necessity of calling the attention of the trade to restraining the sale of them.

On the European Continent there are laws prohibiting the free sale of Patent Medicines. The English Government, who formerly granted licenses only to dealers in London and Westminster, has of late issued them all over the country, and it would be but proper should the Dominion Government follow the same system. As it is now, any grocer or pedlar has Patent Medicines for sale without any restriction, whether it contains poison or not. Should any druggist venture to retail dairy products it would certainly create quite a sensation; grocers and pedlars would protest against it; the public would refuse to patronise as druggists the foolhardy one who had vegetables and fish side by side with Lubin's perfumes; still these very grocers keep Patent Medicines, whose only place is on the shelves of a regular drug store, and the same public continue to be imposed upon and to buy from unlicensed and unscrupulous vendors bent upon money making, by abusing of the credulity of people, and are willing to trust the health of themselves and families in the hands of shopkeepers entirely ignorant of the nature of the medicines they sell, and perfectly unconcerned as to whether it kills or cures. The chemists and druggists of Canada have come to the conclusion that the safety of the public demands that the sale of Patent Medicines should be solely in the hands of competent licensed chemists and druggists, who know the nature of the medicines, and who can advise the purchaser as to the effects and doses. It is injudicious to countenance any longer such encroachments upon the rights of trade. It is a fact that general store keepers sell not only patent medicines but other articles in contravention with the Pharmacy Act.

The only way to remedy this evil is to appeal



to the Dominion Government to issue licenses for the sale of Patent Medicines, and grant them only to chemists and druggists, as the proper persons to deal in such articles, the exception to this would be only in the rural districts where there are no drug stores. In that case the license should be given to some competent and responsible party, such as the postmaster, but under no consideration, should the sale of patent medicines be entrusted to unlicensed shopkeepers or pedlars.

#### ECHO.

**THE POISON IVY AND ITS REMEDIES.**—Poison ivy, *rhys toxicodendron*; poison vine or climbing ivy, *rhys radicans*; poison sumach or swamp sumach, *rhys vernix*; and poison elder, poison dogwood, *rhys venenata*; are all plants of the same family. Their juice when applied to the skin, has the effect of producing inflammation and vesication; and the same poisonous property is possessed by a volatile principle which escapes from the plant itself, and produces, in certain persons, when they come into its vicinity, an exceedingly troublesome erysipelatosus affection, particularly of the face. There is frequently itching and redness, a sense of burning, with tumefaction, vesication, and ultimate desquamation. These effects begin immediately after exposure and usually decline within a week.

The principle of treatment should be based upon the fact that the milky juices of these shrubs are neutralized and made harmless by alkaline washes, and these washes may be used as preventives as well as remedies. Our forefathers in the profession depended upon a light cooling regimen, with saline purgatives, and the local use of cold lead-water. Experience has proven alkaline washes to be the most reliable remedies, such as a solution of pure carbonate of potassa, or salt of tartar. Carbonate of potash procured from cream of tartar is preferable to that obtained from pearl-ash in these cases. It should be used of the strength of two ounces to eight ounces of water, and applied to the affected parts several times daily. Strong suds, made from soft or lye soap, white lye, ammonia water—two to three desert-spoonfuls to a pint of water—or a little saleratus dissolved in water, are excellent washes. White lye is made by throwing two quarts of hardwood ashes into a pail of water, stirring and then allowing it to settle—the clear supernatant liquid is white lye.

When a person is exposed to the influence of these plants, which, when bruised or cut, have the power of affecting some skins when several feet distant, although most persons require to touch the plant before it affects them, he should wet every part of the skin that is likely to be exposed or uncovered, with one or another of

these washes, allowing the wash to dry upon the skin, by no means wiping it off. This plan is said to protect the skin from the poisonous influence of these plants. In the same manner, if one has been exposed, or fears he has, let him follow the same plan and allow the wash to dry upon the skin.

Where the skin has already become red and swollen, and there is itching and stinging, these lotions should be freely applied by means of cloths wet with them, allowing them to dry upon the skin. Keep the patient cool and quiet, let the diet be spare and cooling, and keep the bowels gently open. Where the skin is very extensively inflamed, and the applications are made too perseveringly, it may happen that metastasis to the bronchial mucous membrane may take place, and great oppression of breathing with urgent sense of suffocation be felt. In such cases the application of mustard over the lungs affords relief. As prevention is always better than cure, persons should shun the immediate neighborhood of these poisonous plants when practicable to do so.—*Canada Lancet*.

**A REMEDY FOR THE ERUPTION OF POISON OAK, IVY AND SUMACH.**—Dr. S. A. Brown, U. S. N., Mare Island, California, believes that he has found a specific for the eruption caused by contact with poison oak, sumach, ivy, huahoo, cashew nut, etc. He writes:—"This specific is *bromine*. I have used it with the same unvarying success in at least forty cases. The eruption never extends after the first thorough application, and it promptly begins to diminish. Within twenty-four hours, if the application be persisted in, the patient is entirely cured. There is no pain attending its use, as from that of astringents. Of course the epidermis peels off as after other treatment.

"I use the bromine dissolved in olive oil, in cosmoline, or in glycerine. The application with glycerine is painful, and, I think, possesses no advantage to compensate for the irritation. The strength of the solution is from ten to twenty drops of bromine to the ounce of oil, used by rubbing gently on the affected part three or four times a day, and especially on going to bed at night. You wash off the oil twice a day with castile soap.

"The bromine is so volatile that the solution should be renewed within twenty-four hours of its preparation, as it will get out of a bottle, however well corked. It is best to stand the bottle on its cork end, in the intervals of application.

"I have seen no publication of this treatment, and I, therefore, send you my experience with it, hoping to attract to it some little attention, and do the good which must result from its adoption." (The Medical Brief.)

## Original Communications.

*The Endoscope of Dr. Cruise, of Dublin.* By FRANCIS WAYLAND CAMPBELL, M.A., M.D., L.R.C.P., London, Professor of Physiology, Medical Faculty of Bishop's University, Montreal.

(Read before the Medico-Chirurgical Society of Montreal, August 8, 1878; also before the Alumni Medical Association of Bishop's University.)

It is an old adage, that every dog has its day. In medicine we may apply this to not a few remedies that have been ushered into notice with a flourish of trumpets, as if their power was sufficient to make them a panacea for all the ills to which the flesh is heir. Mechanical genius has given many aids to the surgeon, in pursuit of his calling. The laryngoscope of Czermack has brought that portion of the throat, previously beyond his sight, plainly into view; the ophthalmoscope of Helmholtz enables the oculist to examine the pathological changes occurring in the deep structures of the eye; while the revival within a comparatively recent period, by Recamier, of the long-forgotten speculum utero, has been a perfect mint of wealth to those who recognize in the uterus the *fons et origo mali* of nearly every ailment which occurs to the female subject. All these instruments are to-day in general use, principally, of course, because their employment has led to very great improvement in the treatment of the diseases, for the discovery of which they have proved so useful, but, also, because they are readily employed and do not take up a great deal of time. The endoscope, upon which I desire to say a few words this evening, has many claimants for the honor of being its discoverer. Upon the merits of these various claimants I do not propose to enter. I shall simply satisfy myself by saying that, early in the present century, there is evidence to show that an instrument, somewhat like an endoscope, and called "*a light conductor*," was in use. Any disposed to study out the early history of this question, I direct to an article in the *Philadelphia Journal of Medical and Physical Science*, 1827. Some twenty years ago, however, Desormeau issued in Paris a little work on the endoscope, which attracted some attention, but his instrument had many serious defects—one being insufficiency of light—and the opposition

he met with was so very great that its employment was limited. Still, his patient working paved the way for the improvements of later years. Twelve years ago the attention of the English profession throughout the world was directed to the endoscope, by the efforts of Dr. Cruise, of Dublin, who, at that time, produced an instrument far superior to any previously invented. It was said "to enable surgeons to see parts which, without its aid, were wholly beyond the reach of vision!" One year later, viz., in 1866, being in Dublin for two weeks, I had the pleasure of forming the acquaintance of Dr. Cruise, and see him use his endoscope in several cases. I had thus vividly brought before me the usefulness of an instrument which at that time was attracting great attention throughout the British Isles. To show the importance of this instrument, it is only necessary to contrast the position of a physician called upon to treat a malady which it is possible for him to see, and one hidden from view. As an example, let me take a diseased eye and a diseased urethra. He will not content himself by simply *looking* at the eye, and calling it an ophthalmia. Certainly he will not, if he be a conscientious and a careful physician. On the contrary, he will examine the lids, the conjunctiva, the cornea, sclerotic, anterior chamber, lens; and, if needs be, he will take his ophthalmoscope and investigate the vitreous humor and retina to ascertain what structures are engaged. I need hardly state the amount of information such an investigation would afford, both as to the seat of disease and its nature, whether traumatic, catarrhal, arthritic, syphilitic, or scrofulous. In fact, such an investigation will lay the foundation of a correct diagnosis, a truthful prognosis, and a rational treatment. In contrast, let me for a moment sketch the position of the surgeon in a case of ordinary gleet. In many, perhaps in most instances, he can only guess, by uncertain symptoms, and perhaps unreliable antecedent history, whether the discharge arises from simple catarrh, from chronic inflammation, from a relaxed mucous membrane, from syphilitic ulceration, from a granular condition of a portion of the canal, or from several other causes which might be named. In his uncertainty, his treatment must, as a necessity, be empirical, and his prognosis unreliable, for he cannot tell

whether the disease will be harmless in its results, or likely to lay the foundation of organic stricture. The endoscope, however, alters all this. By its aid the urethra can be seen and minutely examined from its orifice to the neck of the bladder, and after the eye has had some considerable practice in the use of the instrument, each single speck of disease can be seen, and, if need be, subjected to precise local treatment. My experience of the endoscope is almost confined to its employment in diseases of the urethra. I have a few times used the lantern for illuminating the ear, in which I have found it very useful, but having, within the last few years, sent my ear cases to Dr. Proudfoot, lecturer on diseases of the eye and the ear in Bishop's University, I have not had opportunity for its application in this way. There is, however, no portion of the human body into which a straight tube can be introduced, in which it will not be found of service. Dr. Cruise claims that with it the interior of the bladder may be thoroughly investigated; calculi examined, and information gained as to their size, figure and number, also whether loose or encysted. The rectum has been several times examined by me with the endoscope, far beyond the reach of the finger, upon one or two occasions, Dr. Drake, of this city, assisting me. The number of cases where I used it to examine the rectum was too small to give any great results, but it revealed considerable ulceration in one case, and I can conceive of its employment being useful in this locality. The instrument has also proved useful in examining the interior of the uterus. Let me now describe the instrument. In the first place there is a tube, or speculum, which is introduced into the cavity to be examined. At one extremity of this, a mirror of polished silver, perforated in the centre, is placed at an angle of  $45^{\circ}$ . The function of this mirror is to reflect the light which is placed laterally into the tube, so as to illuminate it to the end. As the tube is very small in calibre, a most brilliant light is required, and in order to obtain the best effect it is made to converge slightly on the mirror. This convergence is attained by interposing between the light and mirror a plano-convex lens of suitable focal length. The light being sufficient, the lens properly adjusted, the mirror bright and correctly placed with respect to the tube, it becomes a

matter of facility for the eye, looking through the perforation in the mirror, to see clearly to the bottom of the speculum. The description I have given in most particulars would serve almost as well to describe the endoscope of Desormeau, as that of Cruise of Dublin. But Desormeau's endoscope was deficient in illuminating power, and this is the point in which Cruise claims his instrument to excel. In experimenting with polarized light, he became aware that one of the brightest illuminations which can be obtained is that given off by the thin edge of the flat flame of an ordinary petroleum lamp. Moreover, the intensity and steadiness of the light he found much increased by adding ten grains of camphor to the ounce of petroleum. The camphor increases the quantity of carbon in the petroleum, but the draught being good its combustion is ensured. To obtain the best effects from the light, a few precautions are necessary. The room in which the examination is made, as far as possible should be darkened; the lantern must be held steadily in a vertical position, whatsoever the position of the exploring tube may be. A variety of specula are required for the exploration of the different regions of the body. For general use the urethral tube, which I now show you, is the one generally employed. It consists of a narrow portion, about the size of a large catheter, and just six inches in length; the remainder gradually dilates to form the part which fits into the receiving lock of the lantern. A wire stilette, snrmounted by a plug, which can be inserted into the tube, is used to facilitate its introduction into such narrow canals as the urethra. At one side there is an opening, wide above and narrow below, intended to admit probes, carrying either cotton wadding or sponge to wipe the parts under examination, or to apply caustics if deemed necessary. Three or four sizes of these urethral tubes are required, and I have several sizes, as you will perceive. They answer very well for other situations, such as the uterine cavity and nasal fossæ. In the latter situation, the instrument has several times been enabled to locate exactly the attachment of a nasal polypus. A tube is also provided for examination of the rectum, which I now show you.

The most useful field for the employment of the endoscope is the urethra. By its aid diseases of this part, otherwise merely subjects of con-

jecture and empyricism, are rendered as clear as to diagnosis, and really nearly as satisfactory respecting treatment, as affections of the eye. Before using the endoscope on the urethra it is well to ascertain that it is free from constriction. This can easily be learned by passing a bougie. This being done, and the road known to be clear, it is best to examine it from the neck of the bladder to the glans penis. Place the patient reclining in an easy chair, with the buttocks near the edge of the seat, and the thighs well separated. Kneeling between the legs, introduce the tube with the plug well oiled until it has passed the triangular ligament of the perineum. Then introduce the index finger, well oiled, into the rectum, and guide the passage of the tube through the membranous portion of the urethra into the prostate region. As soon as it has traversed this region, withdraw your finger from the rectum, extract the plug from the tube and attach the endoscope, which has previously been made ready. Holding the endoscope in the left hand, gradually withdraw it, at the same time keep the eye closely applied to the eye piece. While withdrawing the tube it is well now and then to reintroduce it a short distance, and also to increase or diminish the light; in this way, it is said, various views are obtained. As the tube traverses each portion of the canal, the lining membrane comes into full view, bit by bit. If a difficulty occur in seeing any portion, it will generally be found to arise from oil, blood or mucus obscuring the surface. I need hardly say this can be easily removed by one of the stillets covered by wadding.

In the introduction of the endoscopic catheter it is necessary to be careful not to enter the bladder, or a rush of urine will fill it up and stop the examination. This precaution may to some seem unnecessary, as the catheter is a straight one; but Dr. Cruise says that a straight instrument will enter the bladder with almost as much facility as a curved one.

Before attempting to discover morbid conditions of the urethra with the endoscope, it is best to study its appearance in its natural healthy state. To one unconnected with an hospital, this is a matter of much difficulty, as few would care simply to gratify a surgeon's curiosity to allow the introduction of the endoscope tube into their urethra. Still, the attempt

should be made. Those who have had opportunities of doing this describe the lining membrane of the urethra in a healthy condition as being throughout of a pale rose tint, its surface smooth and polished, and glistening with its coating of mucus—that portion near the glans being deeper in color. All this I have, from personal examination, been able to satisfy myself of. It would be quite beyond the object of this paper to enter into any details with regard to the numerous pathological conditions of the urethra which the endoscope has revealed; but from a moderate use of the instrument during the past eleven years I hesitate not to assert that in many cases of obstinate gleet it enables you to see the cause of the discharge, and seeing the cause, enables you to apply the necessary remedies directly to the part. An instrument so useful in a class of cases usually so troublesome and annoying to the surgeon would, one would suppose, receive a large amount of encouragement, and that it would be met with among the *armament* of all leading surgeons. Such is not the case. For a few years it was hardly possible to take up a medical journal without finding something regarding the endoscope in it. Now its name is seldom mentioned, and I have no doubt but that, like many another ingenious surgical contrivance, it has had its day. Till some one of an ingenious turn of mind still further improves the instrument, its use, I have no doubt, will be limited, confined to those, perhaps, who, having seen its use in the hands of its great master, Dr. Cruise, of Dublin, were impressed with its usefulness, and which experience has corroborated. Of this number I claim to be one.

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*Tincture of the Muriate of Iron in Diphtheria.*—

By W. P. SHOEMAKER, M.D., of Elk City, Pa., U.S.

My apology for writing to a Canadian journal is, that I had the pleasure of making my home in the Dominion for a few years. I do not know your treatment for diphtheria in Canada at the present time, but I know that it used to differ from the course I mean to suggest. Here we have diphtheria almost all the time, and such a form of it as I never saw in Canada. In rural districts, where they get little help, whole families die. I have taken no notes of

cases, but will give you general results. I never swab the throat, nor use any local measures, but empirically give the following prescription:—

Tinc. ferri mur..... 3 ii.  
Chlo. pot..... 3 i.  
Glycerine ..... 3 i.  
Aquæ ad..... 3 iv.

Sig. Teaspoonful every two hours.

Of about one hundred cases in the last two months none got seriously ill whom I saw before the formation of the membrane. The four or five deaths were all in-patients, whom I did not see until after the membranes had fully formed. This prescription does not much relieve the general symptoms, but the alarming symptoms caused by the tough thick membranes are universally prevented, by stopping the formation of membranes. They rarely get thicker than tissue paper under the treatment. Every physician in this part of the country will endorse my statements. The disease which I once so much dreaded has lost all its terrors to me. I occasionally give bromine in congestion, but not as a specific, which I believe iron to be.

*Twin Birth: Extra Digits.* H. CHIPMAN, M.D.,  
Grand Pré, Horton, N. S.

Mrs. L., the mother of several children, was delivered of twin boys on the morning of June 15th, 1878, after a two hours' labor. They were delivered by a midwife, and one followed the other as quickly as possible. I arrived in time to deliver the placenta, there being two, with a cord attached to the centre of each, and each being as large as a placenta in a single birth. The children weighed fifteen pounds, one seven and the other eight. The smaller was perfectly normal, while his heavier brother had an extra finger on each hand, and toes to match. The extra finger on the left hand hung by a particle of skin, and I snipped it off with the scissors; the finger on the other hand and the toes were united with their fellows so as to represent a web-foot. This is the second time Mrs. L. has borne twins, one of the previous pair having the extra digits. The woman herself was born with them, and the toes were not removed, and she is obliged to place her foot on the floor, and have it chalked around, instead of the ordinary measurement, in having boots made. Her mother, also, had the extra digits.

## Progress of Medical Science.

### ON CONJUNCTIVITIS.

A CLINICAL LECTURE DELIVERED AT THE UNIVERSITY MEDICAL COLLEGE IN THE CITY OF NEW YORK,

By D. B. ST. JOHN ROOSA, M.D.,

PROFESSOR OF OPHTHALMOLOGY.

(Reported for THE N. Y. MEDICAL RECORD.)

GENTLEMEN:—I will make this case before us a text for a few remarks upon *conjunctivitis*. The history gives us very little information as to the causes of the attack of inflammation of the conjunctiva. There was no exposure to dust, or cold, or wind, or any excessive use of the eyes; nor was there, so far as we can learn, any contact with other inflamed eyes. This woman spent most of one day ironing clothes. She has never had a previous attack of this disease. On the day previous to that spent in ironing, she read considerably, however. That was four days ago, and she now has inflammation of the conjunctiva, which has been treated, at the Manhattan Hospital, by the use of astringents and the sulphate of atropia.

I happen to know that the patient has a chronic disease at the back part of the eye, for she was under my care for choroiditis at the Eye and Ear Infirmary some fourteen years ago. This condition renders her rather more liable to conjunctival inflammation than she would be were the back part of the eye sound. Such is my text, brief though it may be.

Conjunctivitis—Inflammation of the Conjunctiva. Conjunctiva, from two words, which mean to join together—the mucous membrane which joins the lids with the globe of the eye. Conjunctivitis is an affection which every practitioner of medicine is bound to know how to treat.

It is an affection which must not be confused with iritis, or rather, iritis should not be confounded with it. It occurs as frequently as pneumonia or pleurisy, and it may and does destroy eyes, and thus, sometimes, renders the state of the man or woman affected much more mournful than if the victim had been cut off by either of the inflammations of the chest.

Conjunctivitis is divided into three general varieties. Such divisions are somewhat arbitrary, however; you cannot always distinguish one from the other, any more than the United States can be distinguished from Mexico as we pass over the artificial boundaries between the two countries. In many cases, then, you will not be able to make the divisions, and, in others, they can be made with considerable satisfaction.

1. *Catarrhal Conjunctivitis*.—Under favorable conditions, this is a self-limited disease, as much so as measles, or scarlet fever, or pneumonia.

Its chief symptoms are: hyperæmia of the conjunctiva, the network of blood-vessels is injected, not particularly marked towards the ciliary region, but there is a general vascularity of the membrane. A pure catarrhal conjunctivitis is not attended by great lachrymation or photophobia. There is no sluggishness of the pupil, and there is no deep-seated pain.



The other characteristic symptom is increased secretion—hence the name catarrhal.

The patient's subjective symptoms are not important to the diagnosis, but they may be roughly stated as a feeling as if sand was in the eye, and a blurring of the sight. The sensation of roughness is due to the pressure of the enlarged blood-vessels, and the blurred vision to the presence of mucus and tears upon the cornea. All that this form of conjunctivitis requires in way of treatment, in many cases, is to keep the eyes clean. This can be readily done by bathing them in pure cold water. The patient should also wear a pair of protecting glasses—not goggles, which will keep the eyes free from dust and everything that may excite inflammation of the conjunctiva.

But a simple catarrhal conjunctivitis occurring in delicate persons, especially children, amid bad hygienic surroundings, and among persons who are not noted for habits of cleanliness, may run into phlyctenular conjunctivitis almost before you are aware of it. Then you will see, most commonly near the margin of the cornea, either little yellowish red elevations mounted by a vesicle, or a small ulcer which has been formed by the rupture of a previous vesicle.

This form of conjunctivitis, at its outset, requires a local anodyne—atropia—and a great deal of general care but to-day I only desire to speak of the three forms of pure conjunctivitis, catarrhal, blennorrhœal, and purulent. Again, catarrhal conjunctivitis occurs in persons who are exposed to any continued depressing influences, or who are obliged to work in places where they are exposed to mechanical irritants which are liable to excite new inflammatory action; and under such circumstances the disease may advance to the chronic stage, or go on to blennorrhœa. For example, catarrhal conjunctivitis occurring in a student who continues under the depressing influence of the dissecting-room, who goes on with his studying and note-taking, who continues to sit in the bad air of the lecture-room, is very apt to advance to a blennorrhœa, or, what is more likely, become a *chronic catarrhal conjunctivitis*. A mechanic with acute conjunctivitis will soon have a blennorrhœa, or a chronic inflammation, if he persists in his work.

With reference to *treatment*, it is perhaps safer to tell you that it is best to treat a simple catarrhal conjunctivitis by using locally some mild astringent, like the sulphate of alum or zinc, in solution of about two grains to the ounce of water, as well as washing the eyes with cold water and placing the patient under favorable hygienic influences. Besides this, cold water may be freely used on the closed lids, as a douche, or by means of small bits of cloth. It is well, however, for you to remember that the disease, like many others, has a marked tendency to get well, and that you are not to attack it with blisters, or nitrate of silver, or to place the patient in a dark room, and so forth, as though it were a case which demanded the most vigorous and heroic measures at your command.

But, let us suppose that the disease goes on to the next stage—to blennorrhœal conjunctivitis—in which we have to deal with something more than

mere hyperæmia, with very decided increase in the natural secretion. There is now a positive increase in the natural secretion of mucus; with this there is mingled more or less pus, especially at the corners of the eyes. There is also slight engorgement of the lids, and an engorgement of the papillæ of the lids; perhaps also a swelling around the margin of the cornea. Here you have to deal with a condition which demands a much more active and persistent course of treatment than that recommended in simple catarrhal conjunctivitis; you cannot trust alone to change in hygienic surroundings and the adoption of certain rules regarding cleanliness, but you must use astringents.

What does the astringent do? In the first place, it increases the hyperæmia, it increases the quantity of serous exudation; in short, it increases the inflammatory process in which the disease itself consists, but its secondary effect is to constrict the blood-vessels, and perhaps the adjacent tissue, and following this comes the relief for the hyperæmia and the inflammatory process. An astringent caustic does more than this. It actually causes an eschar, which is thrown off.

In these cases you will need to apply, not only simple astringents, but, perhaps, caustic astringents. Of these latter, nitrate of silver and sulphate of copper hold perhaps the first rank. Almost the only guide you can have with reference to the use of these astringents and caustics is the effect produced upon the patient.

If he suffers for more than half an hour from the increased severity of the symptoms caused by your astringent application, it is pretty good evidence that the astringent employed is too strong, and either a weaker solution, or a milder agent must be employed, or perhaps the astringent be given up altogether for a few hours, or a day or two.

If symptoms of corneal, or deeper-seated inflammation arise, an anodyne application of sulphate of atropia, two grains to the ounce, should be used three times a day.

It is a wise practice in ophthalmology to use as few applications, or agents, at any time, as is consistent with good care of the eyes. When a patient suffering from acute catarrhal conjunctivitis is pursuing an employment that of itself is likely to expose his eyes to injurious influences, very much will be accomplished by simply putting him under proper conditions of life until the attack be over. If this be not done, although there may be no advance to a higher form of disease, there may be a gradual sliding into a trachoma. When trachoma is reached, we have come to a very obstinate and sometimes incurable condition. For there is thickening and warping of the cartilage of the lids, the eyelashes may be constantly brushing upon the conjunctiva, and the patient has a sensation as if ten thousand grains of sand were in the eye. As a result of this constant irritation, the delicate structure of the cornea is very much injured. Its epithelium and deeper layers are involved in disease, and the case may become one of pannus, and perhaps one of ulceration. Then add to the

condition of affairs, eversion of the lids, so that the tears, instead of passing away through the natural channel, flow over the cheek and keep the face in a more or less constant state of excoriation, and you have one of the most distressing of conditions. It is a condition that cannot be permanently and thoroughly remedied by any operation or course of treatment, although susceptible of relief. Eversion and inversion of the lids may be corrected for a year or two by an operation, but the relief is usually only temporary and the condition returns; for the state of the parts is such that it is impossible to restore the lids to their complete functions.

To recapitulate: granular lids, trachoma, opacities, vascularities, and often perforation of the cornea, entropion, ectropion—all consequences of blennorrhœa; and many of them incurable conditions, which can only be alleviated, but never thoroughly cured. Hence it is that conjunctivitis, in its early stages, has its importance for the general practitioner.

We next come to the form of conjunctivitis which is the most important of all—the *purulent variety*. I could relate some very sad stories regarding children who have been born with good eyes, but to which, through the carelessness of nurses, little particles of pus have been transmitted from towels; or who have been inoculated with pus from the genitals of the mother, and who, within a few hours after birth, have had fully developed purulent conjunctivitis, and who, having their eyes improperly treated by poultices, have lost them. The conjunctiva is engorged with blood, and the lids become so swollen that it is impossible for the child to open the eyes, and pus wells up through the palpebral fissure.

Now, if by the application of a poultice, which has frequently been done, the disease is fostered, it will extend, and within forty-eight hours from the time of the commencement of the disease the child's eyesight may be destroyed. The cornea has been actually broken down by the poultices. But there is another story. A man or woman becomes affected with urethral inflammation, and through want of personal cleanliness, or by carelessness, pus is transmitted from the seat of disease to the conjunctival sac. Within a few hours you will see developed all the acute inflammatory symptoms which usher in an attack of purulent conjunctivitis.

Purulent conjunctivitis has a malignancy of its own, whether arising in the new-born child or in the adult, from urethral contagion and want of personal cleanliness, or whether it arises as a natural termination or advance of acute catarrhal blennorrhœa.

There is a popular idea that a purulent conjunctivitis arising from infection from a suppurating urethra is more severe in its course than the same form of disease arising from other causes: but this is probably an error.

Purulent conjunctivitis also occurs epidemically, especially in hospitals, in workshops, in armies, and in badly ventilated rooms where many people are crowded together.

There is another point to be mentioned. A drop or atom of material removed from a catarrhal conjunc-

tivitis occurring in my eye may excite a purulent conjunctivitis, if transmitted to a healthy eye. This shows that it is the same disease in both instances, the cases differing only in intensity.

Now, what is to be done when you meet with a case of *purulent conjunctivitis*?

There is one thing which it is very important *not* to do, and that is, to stand still with folded arms. You must know what to do, and you must do it with the very greatest celerity. If you are called upon to go into the country twenty miles, and upon your arrival find that you have to deal with an inflamed eye, the lids of which are so swollen that they are shut, and pus is streaming up between them, do not simply tell the friends to wash the eye out once or twice a day with alum-water, to put on a poultice to quiet the pain, and perhaps leave a two-grain solution of nitrate of silver to be introduced into the eye occasionally, with directions that the patient be placed in a dark room, with quinine or calomel to subdue the fever. If you do pursue this plan the patient will almost certainly lose his eyesight, and for that loss you should be held responsible, and no one else.

Instead of that, do just what your common sense would dictate should be done when a man comes to you with one or both of his eyes filled with cinders or dust. What would be the first thing suggested by the common-sense rule of practice? Certainly it would be to wash out the cinders and dust.

The first thing to do, then, when called to a case of purulent conjunctivitis, is to remove the pus from the eye. If necessary, the eye should be washed as often as every half-hour, and it will be your first duty to instruct the mother, the sister, the brother, or the nurse, so that this part of the treatment may be continued regularly and thoroughly, just as often, day and night, as may be necessary. When you have so instructed the attendants that the eye can be kept free from any accumulation of pus, you will have done your duty, and not until then.

Thorough cleanliness, then, is one of the most important elements in the treatment of this disease. This can be accomplished by syringing out the eye with tepid water, or, perhaps better, by wiping the eye with a piece of soft sponge or bits of soft cloth which have been dipped in tepid water.

Again I say, gentlemen, see that the eyes are kept clean, and for their cleanliness hold yourselves responsible.

In this early stage, if the swelling of the lids is very great and the temperature is increased, cold applications should be made, and that is best done by using bits of cloth which have been made cold by being placed on a block of ice or dipped in ice-cold water, such as one can get from the bottom of a well even in midsummer. These cloths must be changed sufficiently often to avoid any possibility of their becoming warm enough to make a poultice. This will sometimes be every two minutes. The application of cold should be kept up constantly, day and night,

until the temperature of the lids is reduced and the hyperæmia lessened.

When this has been accomplished, you may begin the use of astringents, and for children as good a one as any is a two-grain solution of alum in water, allowing the solution to pass between the lids. This should be employed about twice a day. There is some difference of opinion with reference to the astringent to be employed; some claim that nitrate of silver possesses peculiar advantages; but I feel satisfied with the effects produced by the alum solution, and I am sure it is a safer application for young children. Perhaps when you come to the treatment of adults you will not feel satisfied with the effects produced by the alum. If not, the nitrate of silver may be used in ten-grain solutions. If the nitrate of silver is used, it is important to neutralize any excess that may be applied with a solution of chloride of sodium. The mitigated stick (nitrate of silver and nitrate of potash) may also be used on adults. If the tension of the lids is very great you may be obliged to take your scissors and divide the external canthus, cutting through the conjunctiva, the muscle and the integument at the same time, so as to loosen the lids and relieve the pressure. This operation is called canthoplasty.

If that symptom is present, which is very likely to occur in the advanced stages, namely: engorgement of the conjunctiva about the margin of the cornea, or chemosis, the swollen ring of tissue may be snipped here and there with the scissors; in that way the hyperæmia and the tension may be somewhat relieved. If the patient is vigorous, leeches may be applied to the temples in the very early stages. Until the acute inflammatory symptoms have subsided, only mild astringents, not astringent caustics will be required.

Indeed, after their use has been commenced, it may be necessary to discontinue them because of the inflammatory reaction which they may produce.

While the inflammation is intense, attend thoroughly to cleanliness and the application of cold as the chief resources of treatment. With cleanliness alone you will be able to effect a cure in very many cases of ophthalmia neonatorum, although I should be unwilling to rely upon a treatment wholly without astringents.

What are the dangers in purulent conjunctivitis? They relate chiefly to the cornea and they are very great.

For, if all the other parts of the eye are perfectly sound, and the cornea is completely opaque, the sight is lost, the world is nothing to the patient, and you will not be able to do anything to bring relief.

The object of treatment, then is to save the cornea; first, from the influence of the acrid pus, and second, from increased tension. At the same time, when you use an astringent caustic, you must use good judgment in order not to affect the cornea by it. You are always sailing between Scylla and Charybdis in the use of caustics in these cases. The caustic that I would advise you not to use is the solid stick of nitrate of silver. It is almost impossible to gauge its effects.

When once the disease has reached the stage in which the cornea is infiltrated with pus, you are to know that your case is in a dangerous condition, and you will need all the skill and judgment you can possibly obtain if complete loss of vision is prevented.

Under such circumstances you may tap the cornea, possibly do an iridectomy, use atropia; but I do not dwell upon these points at this time, because I wish especially to impress upon you the importance of proper treatment in the early stage of the disease. I wish especially to impress upon you the difference between the early stage of purulent conjunctivitis and the early stage of a simple catarrhal conjunctivitis. For, if properly treated during the early stage, you will succeed in saving a large percentage of eyes; but if poultices are applied and pus is allowed to remain under the lids, the cornea may be destroyed in less than a week, and, as a matter of course, vision is lost forever.

A word or two as to the prevention of conjunctivitis and its consequences. When you enter upon the practice of your profession and are called upon to take medical charge of asylums, county-houses, or any institution or place where large numbers are congregated, it will be your duty to guard against the occurrence of epidemics of ophthalmic disease; and, if purulent ophthalmia is developed, or catarrhal ophthalmia appears, or better, when the eyes are sound, to see to it that each patient has a separate place for washing the eyes, has separate towels, is not permitted to sit in a room while it is being swept; that plenty of fresh air is furnished, and that the patients are not permitted to strain their eyes by attempting to read by the aid of bad light. In other words, it is your duty to see to it that conjunctivitis is not caused or propagated through any neglect on your part. You are only exercising your highest functions as physicians, when you are guarding against the occurrence of disease. You must labor to impress yourselves upon the communities in which your lot is cast, as one of the directors of their sanitary condition, and not be content with being sent for when an epidemic is upon them.

I am here asked by one of the class, if diluted milk is not a good wash to be used in conjunctivitis.

Gentlemen: The good Lord has given us plenty of pure water for the purpose of securing cleanliness in the treatment of disease, as well as in health; but there seems to be a disposition to seek out mysterious and extraordinary agencies for simple purposes, while the study of the principles of treatment is neglected. Be not anxious about the details of prescriptions; be anxious only to know the general principles, and your application of them may vary from each other and yet all be correct.

Milk is well enough, but it is not so good as water; and water is much more accessible, and perhaps is less liable to act as an irritant to the eye, especially at certain seasons of the year.

I have spoken of alum as the astringent which I employ in conjunctivitis, but I am not wedded to that one, sulphate of zinc, or other astringents, indeed, I care very little, within certain bounds, what astringent

gents you employ. I have not been anxious to teach you what astringent you should employ, but rather to indicate in a general way the nature of simple conjunctival inflammation, and the principal which should guide you in its treatment.

#### ON CONSTIPATION.

THOMSON—*The N. Y. Medical Record.*

Constipation is due to deficient action of the small, and some portion of the large intestines. Of the small intestines, there are two operative causes: deficient secretion, and want of innervation, or muscular action. Deficient secretion in the small intestines may be due to some disturbance of the liver, and constipation, as a result, may date from some severe form of fever in which the liver was involved. In such cases there is not a preponderance of fecal accumulation and impaction, but rather, instead, a sluggish action of the bowels, recourse to medicines being necessary to bring about a movement once in four or five days. The symptoms of deficient action of the small intestines other than constipation, are usually negative; the one which gives the patient the most discomfort, is a dull indefinite headache, located in the posterior part of the head, and is best relieved by such remedies as will promote a free discharge of bile. The tongue is not usually large and flabby, but is reddened along the edges and tip. The secretions of the mouth are commonly viscid. The treatment should not consist of mild cathartics, or purgatives, as the condition of the case would be provoked by them, but what is necessary, is to increase the amount of fluid in the intestines by causing the patient to drink a great deal more water than is his custom. The laxative action of the water may best be insured by the addition of some mild saline; the reason of this is the mixture formed by the union of some saline with water does not readily pass from the intestinal mucous membrane into the general system,—water being retained in the intestinal tube by the saline, excites peristaltic action of the bowels, and so produces an evacuation of its contents. To increase the power of action of the intestines the author uses small doses of quinine, combined with sulph. magnesia, e. g. sulph. mag. 3 i., sulph. quin. gr. i., mixed and drank in a glass of water every morning. It takes, however, usually from one to two weeks before much effect is noticed.

Deficient innervation of the small intestines, as a rule, accompanies constipation in elderly persons, and also in those whose habits are sedentary. The means to be employed to overcome this form of constipation are quite at variance with those used in the form of constipation just spoken of. If much water is given this class of patients, weakening of their digestive powers, followed by loss of appetite, and heaviness in the head, will be the result. To increase the innervation

of the secretory apparatus, in those who are obliged to remain at their occupations, water is applied externally. A sitz bath, with the water as cold as the patient can bear it, and have good reaction follow will in very many cases work wonders. Sponging the spine and bowels with cold salt water, made as irritant as can be borne, on rising in the morning, is a very efficient method of using water externally. Some cases are benefited by giving the bowels a local shower-bath.

Of the large intestines, the same causes work the same results. Deficient innervation is by far the most common in this form of constipation. Large fecal accumulations, resulting from want of nerve power in the colon, or rectum, are usually present without the patient's knowledge, and rectal abscess may be the result. The treatment consists in keeping the rectum empty by means of enemata, but great care should be exercised against using the syringe every morning for any considerable length of time, as such a habit is likely to become fixed. After using the syringe to remove accumulations in the bowel, other measures for restoring lost innervation to the organ should be instituted. Strychnia used hypodermically into the sub-mucous tissue, often proves very efficient.

#### DIAGNOSIS AND TREATMENT OF PLEURITIC EFFUSIONS.

Dr. Thomas Barlow and Mr. Robert William Parker have just published some observations made by them at the Children's Hospital, Great Ormond Street, and at the East London Children's Hospital, on the diagnosis and treatment of pleuritic effusions in childhood. There is, say the authors, very little more difficulty in *discriminating* lobar pneumonia from pleurisy in children than in adults. It is when we have to do with bronchial catarrh and collapse, with broncho-pneumonia, or with the various forms of tuberculosis of the lungs, that difficulty constantly arises. They have repeatedly observed an amount of dullness due solely to collapse of lung quite equal to that produced by a localised pleuritic effusion. Although, too, broncho-pneumonia and tuberculosis are bilateral, the authors have seen three cases of bilateral empyema and three of bilateral serous effusion. With regard to the measurement of the chest, they have again and again verified Dr. Gee's observation (made with the cyrtometer) that "considerable increase in the sectional area of the chest may occur, and the length of the periphery remain the same, by the passage of the elliptical form into the circular." Rare forms of localised empyema were also met with confined to the root of the lung, or situated between the anterior edge of the lung and the pericardium, or limited to the middle third of the thorax, or localised in two different and widely-separated

parts of the same side. One case of diaphragmatic empyema closely simulated hepatic abscess. With respect to the latter fact, we may observe that even at its commencement diaphragmatic pleurisy of the right side may be mistaken for hepatic or abdominal mischief, inasmuch as children often refer their pain to the wrong situation, and the affection may be ushered in by vomiting and purging. There is often too, a good deal of tenderness about the upper region of the abdomen, and bilious vomiting is often a marked feature in cases of diaphragmatic pleurisy of the right side. Moreover, the authors say nothing about the frequency with which the first symptoms of an attack of acute pleurisy point more to the head than to the chest. Their observations are certainly confined to the stage of effusion, but their experience with regard to the above fact would nevertheless have been interesting to the reader.

Passing on to another point, the delusive character of friction *r le* did not escape the attention of our authors. "In one case," they remark, "we heard a typical friction *r le* over a spot from which immediately afterwards three ounces of pus were drawn."

The difficulties of diagnosis between *serous* and *purulent* effusion are generally acknowledged. Contrary to what is usually stated, in cases of serous pleurisy there is sometimes very marked bectie, whilst with empyema there is often a very moderate degree. The observations of the authors on this subject are very original, and worthy of attention. "It has appeared to us," they say, "that the aspect of the patient—a peculiar an mia, with an earthy complexion—and, above all, clubbing of the finger-ends, have been the most characteristic features suggesting empyema rather than serous effusion. We have never seen a case of serous effusion accompanied by clubbing, and we have seen very few cases of empyema where it has not been present to some degree, even when the illness has been only of a few weeks' duration. So frequent is the association that, we believe, if a child be seen with general pallor and clubbing of the fingers, one ought to think of empyema rather than of the other causes of clubbing, viz., chronic bone-disease, bronchiectasis, and congenital heart-disease."

With regard to the natural course of pleuritic effusion in childhood when unmodified by surgical treatment, the authors remark that retraction of the side is not to be taken as a positive proof that absorption has taken place—that no limit of time can be enunciated as to when a serous effusion will become purulent—that the effusion may continue serous for upwards of two months—that purulent effusion is extremely frequent in children—that the shortest period at which they were able to establish the presence of pus, was fourteen days—that in the great majority of cases empyema in children is

not secondary to tuberculosis—that of the various modes of spontaneous evacuation of the pus, rupture through the lung appears the least unfavorable—that with regard to evacuation by external opening their experience does not supply them with a single really good result, and that the issue of a large number of these cases when left to themselves is most disastrous.

On the subject of treatment we are furnished with advice that appears to be remarkably judicious. With regard to serous effusions, the value of the exploratory puncture is urged not only as a diagnostic but as a therapeutic measure, inasmuch as cases were seen in which it was impossible to resist the conviction that the removal of a very small quantity of fluid has been rapidly followed by absorption. If the effusions be considerable paracentesis should be performed at once, not only to relieve dyspnoea, but to give the lung a chance of re-expansion before adhesions bind it down. There is very little confidence to be placed in medicines; but the external application of iodine, combined with the internal administration of iodide of potassium, has in some cases proved beneficial. As to *purulent* effusions, if the exploratory puncture reveal the presence of pus, we are recommended to withdraw as much as possible with the hypodermic syringe. The possibility of multiple collections of pus should be borne in mind; and if the quantity of pus be incommensurate with the extent of the dullness subsequent punctures should be made, as experience shows the safety as well as the utility of the measure. If the hypodermic syringe does not remove all the pus present, it is better to introduce the aspirator trocar (especially that of Dr. Potain, made by Matthieu, of Paris) and to withdraw as much of it as possible. In most cases, aspiration was performed under an sthetics, in order to facilitate a thorough exploration, to avoid shock and collapse, and to avoid the troublesome cough that usually occurs after paracentesis thoracis. Chloroform preceded by small doses of brandy was the chosen an sthetic. The angle of the scapula was the chosen place for puncture when the effusion is general. A single aspiration is generally sufficient, but successful results have been obtained after repetition of the aspiration up to six times. If the pus should become fetid, or rapidly re-accumulate in large quantity, permanent drainage is recommended; and in all cases this should be by a double opening. If possible, the first opening should be made in front of the thorax, and the second below and internal to the angle of the scapula. A long probe, threaded with a piece of drainage tube, may be passed downwards and backwards from the first opening, and the second incision made over the point of the probe when it is felt through the integuments. The drainage-tube should then be drawn through and secured by tying the two ends together.



Such are the most prominent points dwelt upon in the interesting pamphlet of Dr. Barlow and his coadjutor Mr. Parker. We have drawn particular attention to it as it represents, in respect of a very common and serious affection, the most recent practice and experience of a physician and a surgeon attached to the two largest children's hospitals in London.—*Dublin Med. Press*, July 3, 1878.

#### ON THE USE OF CURARE IN THE TREATMENT OF EPILEPSY.

BY

DR. C. F. KUNZE.\*

My experiments with Curare (Woorara) in 35 cases had very different results. Nine of the 35 cases made a perfect recovery. In most of them the disease had not been existing for a long time, say one, three or five years; in two of the successful cases the patients had been epileptic subjects for over 20 years. Among those who recovered there were some cases in which the disease had produced a well defined influence on the mental condition of the patients. Two of the cases which recovered were undoubtedly cases of inherited epilepsy, the history of these (brothers) is given below. I could obtain no good effect in old drinkers. My experience with Curare leads me to say that *Curare is one of the most efficient remedies for epilepsy*. A case of epilepsy should not be regarded as permanently cured, until a long time after the occurrence of the last attack. A short time ago I saw the return of the disease after an apparent recovery, extending over a period of 4 years.

I made a solution of Curare according to the following formula:

R  
Curare, grs. vii. ss. (7½)  
Aqua. dest. m. 75.  
Acid hydrochl. pur. m. i.

hypodermically, and I inject about 8 drops every 5 or 6 days.

The addition of this small amount of hydrochloric acid makes the solution a clear one, and by this slight modification of my former formula I have avoided almost entirely the severe abscesses at the point of injection, of which I spoke in the 1st edition of this book.

*History*.—Edgar and Hugo Ufer are the sons of a subaltern officer in the Internal Revenue service at Botterfeld, Prussia. The father sustained a severe injury on the head, when, in 1846, during his service as a soldier he tried to stop the runaway of four horses attached to the carriage of the late King Frederick William IV. of Prussia. He was thrown down, dragged along for a distance and received a kick on the

head by one of the four stallions. In consequence of the injuries brain symptoms developed, and the man suffered for over a year from convulsions and very severe headache. Five or six years later the injured man married and became the father of two sons, both of whom were attacked with epilepsy, one in his 18th and the other in his 13th year.

*Hugo*, the elder of the two brothers, is now 25 years of age, and of sickly constitution. The first attack occurred July 6th, 1871, lasting for about one minute, another attack of somewhat longer duration took place the next day, being followed by three attacks on July 9th, occurring with intervals of from four to five hours. July 10th, again, three attacks; July 11th, a light, and three-quarter hour afterward a severe attack, lasting for about fifteen minutes. This last attack commenced with a disposition to weep, dizziness in the head, followed by a sudden unconsciousness. After the attack was over, there was a sensation of numbness over the entire body, the speech was heavy, the patient felt very tired and suffered from very severe headache. From July 11th to July 16th, generally, three attacks occurred daily. July 16th, 1871, the first injection of Curare was given. After the injection the patient felt slight symptoms of unconsciousness and dizziness, until, towards night, he felt perfectly well.

No more epileptic attacks occurred after the first injection. Once every week I gave the patient an injection. After three weeks the prodromatic symptoms, indicating the coming attack, became prominent, but disappeared soon after the prompt injection of Curare. After I had, during the period of six weeks used about 3 grs. of Curare I omitted the injections, and until to-day (end of 1877) no more attacks have occurred.

*Edgar*, the younger brother, is now about 21 years of age, and is also not very strong. The first severe attack occurred March 21, 1870, the second in June, the third in November, 1870. The duration of the first attack was not quite an hour, with the second one the patient was unconscious from 4 p. m. until midnight. The attacks came on without the outcry, and commenced with the sensation as if a stream of cold air was flowing from the mouth. Between the large attacks small ones of a few minutes duration always occurred. The first injection of Curare was given July 20th, 1871. From July 21st to July 25th there was some dizziness, and the patient felt as if an attack was coming on. This sensation, however, disappeared before long, and not a single attack occurred since that up to date (1877). The quantity of Curare used also amounted to 3 grs.; the injections were first given every week, afterwards every second week.

*Hugo Noack*, in Halle, Y. S., suffered since infancy from convulsions, which first commenced when he was only ½-year old and returned about

\* *Practise of Medicine*, I, page 204.

once in four weeks. No other member of the family ever had epilepsy. The attacks always were complete. As to the cause of this disease, the mother of the patient states, that she once nursed the child shortly after a time of great anger. She says the attacks first made their appearance two hours later, and never disappeared since. The unfavorable influence of the disease on the patient's mental faculties, was well defined during the age of school-years, he did not learn well at all, and especially his memory, was gone almost altogether. The attacks occurred so frequently, that hardly a day or night passed by without convulsions. Noack came under my treatment in his 23rd year. After from six to eight injections the convulsions disappeared, and since then, for about eight years, no attack has occurred. Noack is now 31 years of age, married, and is the father of two children, none of whom have suffered from convulsions, up to this time. His mental faculties, and especially his memory, have greatly improved since his recovery. Noack is employed now on one of the large railroads and fulfills his duties satisfactorily to his superiors.—*Paul H. Kretschmar, M.D.*

#### CLINICAL LECTURE UPON THE TREATMENT OF CHRONIC DISEASE OF THE NASAL PASSAGES: EUSTACHIAN TUBE, AND MIDDLE EAR.

BY GEORGE STRAWBRIDGE, M.D., Professor of Clinical Otology, in the University of Pennsylvania Medical School, Phila.

[REPORTED FOR THE N. Y. HOSPITAL GAZETTE.]

As far as therapeutical remedies for the treatment of these diseases go, they are very few in number. Among those which are sometimes employed may be named the muriate of ammonia and iodine vapor. The latter I have given up entirely as it has never had the least beneficial effect in my hands. If the Eustachian tube and middle ear are filled with mucus it must of course be at once removed either by means of the catheter or by Politzer's bag. Of the two, I prefer the bag. The introduction of the catheter must always of necessity be a great source of irritation to the patient, and its effect is no better than that which may be had from the use of the bag.

How then are we to set about the removal of a chronic catarrhal condition of the above passages? If the catarrh began in the pharynx it will be sufficient to treat it there, and when it leaves the pharynx it will also leave the Eustachian tube and middle ear. There will always, however, be a few cases in which the condition will continue in the ear after the disease has been entirely expelled from the pharynx. In such cases I am accustomed to make use of a solution of zinc. This of course must be applied through the catheter, for Politzer's bag will not at all answer the purpose. I am in the habit of

first introducing the catheter and dropping into it three or four drops of a solution of zinc, (3-5 gr. to the f.  $\frac{3}{4}$  j) then by means of the bag I force the zinc through the cavity of the catheter into the ear. In a large number of cases such as the above, I have also treated the disease by solutions of the nitrate of silver applied by means of a post-nasal syringe introduced behind the soft palate.

In other old cases of chronic catarrh of the middle ear where the secretions have ceased and the function of the mucous membrane has become depressed, it is often of great benefit to stimulate by some means the membrane to re-secretion. In such instances there is commonly a marked tendency to peeling of the skin, and slow atrophic degeneration. A number of vapors have been recommended as local applications here. Dr. D. B. St. J. Roosa, of New York, places great confidence in the use of steam for the cure of these conditions. The vapor to be thrown through the catheter into the Eustachian tube. He claims for this agent a double effect upon the parts, first stimulating and then relaxing. The method of application is very easy. It is of course necessary to use a gum instead of a metal catheter. The steam is generated in a boiler and conveyed to the catheter by a connecting gum pipe.

Four years ago I used steam very largely, but of late I have given its use up entirely, and for too most excellent reasons. (1) Because I found that it did absolutely no good in my hands and, (2), because I discovered something far more useful and beneficial to my patients. After I gave up the application of steam I used for a long time the vapor of the muriate of ammonia. This vapor was generated in an apparatus made particularly for the purpose, and was conveyed to the catheter through tubing. After making trial of this vapor for a year I gave it up likewise.

Now, in chronic thickening of the middle ear I use ether, my method of applying it is by means of Politzer's bag. I drop 8-10 gtts. of the ether into the bag. The patient takes some water in his mouth and holds it there. A nose piece is put in his nose, and just as he is swallowing the water I squeeze the ether through the nose-piece into the passages. I have had a very large experience in the use of ether in these cases. I hold that ether is the very best application that has ever been tried, and I offer as my proof the following reasons: (1) Ether is very highly stimulating. (2) It has a powerful anodyne effect, particularly in cases where tinnitus aurium is a symptom. (3) It is an absolutely harmless remedy. I have never had any bad effects from its use. In one or two cases there was a momentary nausea or giddiness, but these symptoms at once passed away. I have often used as much as 30-40 gtts. of the ether at one time. Drs. Politzer and Grüber, of Germany

recommend a mixture of one part of chloroform and two parts of ether as a topical remedy, but I cannot divest my mind of the idea of danger in such a use of chloroform, and what is more, the ether alone, I think, does just as much good. It is usually thought that Dr. Toynbee, of London, the great authority on diseases of the ear, killed himself by the introduction of chloroform into the Eustachian tube and middle ear. At any rate he was found dead in his laboratory with his instruments and open bottle of chloroform lying beside him at a time when he was known to be experimenting in the above mentioned way with the drug.

You will very often be asked for your opinion with regard to the use of electricity in obstinate cases of the above diseases. Many years ago I sent abroad and purchased a seven hundred dollar electric battery—one of the very best to be procured in the European markets. I tried my battery upon my patients for four or five years, and I do not think I ever saw one case which was in the least benefited by the electric treatment. With regard to the proper way of applying the electric current, it may either be applied with one pole introduced through the catheter into the Eustachian tube and the other pole at the outer ear, or, if this way be not convenient, one pole may be held in the hand and the other introduced into the outer ear.

One or two gentlemen have made use of bougies where there was narrowing of the calibre of the parts, thinking thus to dilate the stricture. In no recorded case has any benefit been derived from this treatment.

With regard to constitutional measures. In those cases to which I have just been directing your attention there is no regular constitutional treatment necessary. Where, however, the disease has been hereditary and has run through many generations the case will only go on from bad to worse unless something be done to bring up the general tone. In this connection I have used two or three remedies with decided advantage. If there be any taint of strumous diathesis I order the bichloride of mercury internally for a long time, and in small doses. A number of high authorities are agreed upon the value of the bichloride of mercury.

The following is a good form of administration.

R Hydrarg. ehlo. corrosivi. gr.  $\frac{1}{6}$   
Elix. cinchonæ. f.  $\frac{3}{4}$  ss.

M. S. Two or three times a day after meals.

Iron is also an excellent drug in this connection. A small amount of strychnia may, with advantage, be joined with the iron in pill form. In old people where there is very decided lessening of the secretions I give ten grain doses of the muriate of ammonia thrice daily. In ordering this drug I leave directions to have it dissolved in f. 3 j. of cinch. elixir, and this again suspended in half a pint of acid water. Muriate

of ammonia, like iodide of potassium, should never be admitted to the stomach unless in a highly diluted state.

I spoke to you early in the hour of the value of ether in cases in which tinnitus aurium is a prominent symptom. Here are two cases whose history I wish to relate to you. This young man has had the tinnitus for seven years. The noise goes on all the time. It worries him horribly at night. In the day time he seems to be constantly followed by some one who wishes to speak with him. His mind is not as yet affected. The noise is like the sound of water falling, and leaves stirring. In this other case the symptom has been prominent for sixteen months. The noise is like escaping steam. The trouble is diminished by the use of a light diet. This disease is very common in every day practice. The agony it entails is often altogether intolerable. Quite recently a cultivated and wealthy gentleman in New York was driven by it to commit suicide. Life was no longer bearable for him.

Here is a patient the drums of whose ears are perfectly white. I will force 8 gtt. of ether into the passages and now let me show you the result. The drum is all of a bright pink color. The man does not feel any the worse for the application.

#### MOLES ON THE FACE.

Dr. Llewlen Thomas writes as follows to the *British Medical Journal*:

"I strongly advise the acid nitrate of mercury in removing moles from the face. The acid should be applied with a splinter of wood, and gently rubbed into the part for several seconds, according to the thickness of the growth. Great care should be taken to prevent the acid from reaching the surrounding skin. There is absolutely no pain attending the application, and the growth gradually shrivels away, and the slough falls off in about a week. I treated a small warty growth in this manner, which existed on the chin of a lady of considerable personal attractions, some two years ago. She was rather alarmed as to the result, as the acid appeared to be working somewhat deeply; and I also myself feared that a scar would be the result. The growth has not returned, and a very faint depression alone remains like a very indistinct small-pox mark. The growth had been repeatedly nipped and cut off, and always grew again, to the patient's great disgust. I have frequently removed small sessile growths from the external ear with the scissors; but there is usually very free hemorrhage, requiring the use of strong styptics, or even the introduction of a needle. These growths usually contain cartilage, and I should in future employ the acid for their removal. The ligature is certainly efficacious, but it is painful, and by no means neat in its results."

## INHALATIONS IN LARYNGITIS.

In a late number of the *London Medical Times and Gazette*, Dr. T. Whipple says—

In all cases of local inflammation—and this remark applies equally to local treatment, either by the laryngeal brush or by inhalation—any treatment which can be directed at once to the seat of the disease has a more immediate, and usually a more lasting effect, than that which operates by the medium of the general circulation. Inflammation of any portion of the skin, for example, due to external cause, is far more successfully treated by poultices, lotions, such as lead and opium, or even by cold water, than by diaphoretics, diuretics, or depressants alone.

Now, inhalations have this decided advantage over the laryngeal brush, that they are less alarming to the patient—a matter of no slight importance when the aperture of the glottis is diminished either by swelling or by paralysis of its muscles; that by them the topical treatment can be maintained for a much longer period, and can be repeated at frequent intervals; that in the case of vapors the soothing effect of heat is combined with the specific action of the drug.

Various drugs have proved beneficial when so administered; but it must suffice on the present occasion to mention one or two of those which have brought about the more satisfactory result. Of medicated inhalations, perhaps the most grateful to the patient are those of benzoin and acetic acid, the formulæ for which are given in the "Throat Hospital Pharmacopœia," viz.: for the former, a drachm of compound tincture of benzoin in a pint of water at 140° Fahr.; for the latter, half an ounce of acetic acid and of glacial acetic acid are to be mixed together, and of this mixture two teaspoonfuls are to be poured into a pint of water at the same temperature, of which the vapors should be inhaled, either from a narrow-mouthed jug or from an ordinary inhaler. The sedative action of these drugs in many cases gives speedy relief to the symptoms. If much spasmodic cough trouble the patient, the vapors of acetic ether, hydrocyanic acid, and conium produce excellent results. These preparations may be used at frequent intervals during the prevalence of the more urgent symptoms, due caution being exercised with regard to that containing hydrocyanic acid. In the event of there being great irritability of the fauces, etc., in consequence of which any application by means of the laryngeal brush is distressing to the patient, local remedies, such as chloride of zinc, may be employed in an atomized form in Siegle's inhaler, or the hand-ball spray producer. A solution of this salt or of the sulphate may be employed in the proportion of two to five grains to the ounce of distilled water, but should be used more sparingly than the above-mentioned inhalations. One caution should be given to the patient in

this method of treatment, viz., that he should avoid all undue exertion in the act of respiration. As a rule, a person who is directed to inhale literally sets to work to perform as many deep inspirations as possible during the time the inhaler is before him. In the first place, this is unnecessary in laryngitis, where the application is merely required for the upper part of the air-passages; and in the second, he adds greatly to his trouble by wearying himself in the process.

In the intervals between the inhalations, topical remedies may still be continued by means of lozenges, but this method can only be employed when the patient's breathing is, comparatively speaking, tranquil. If there be any dyspnoea, it is obvious that the lozenges would be utterly out of place, and probably dangerous as being liable to be drawn into the larynx. Those composed of extract of lettuce as a sedative or of citrate or tartrate of potash as a sialogogue, in cases where a dry, hot condition of the mucous membrane of the mouth or throat is a prominent symptom, I have found extremely serviceable. Being made up with black-currant paste, they are more or less pleasant to the taste. Should the patient be harassed by constant cough, efforts should be made to allay it, as it tends to keep up the existing hyperæmia; in such cases the morphia-ipecacuan lozenge (B. P.) frequently has the desired effect.

## DEATH IN THE DISHCLOTH.

A lady correspondent of the *Rural World* having been startled by *typhoid fever* in her neighborhood some time ago, gives the following good advice about dishcloths:

If they are black and stiff and smell like a barnyard—it is enough—throw them in the fire and henceforth and forever wash your dishes with cloths that are white, cloths that you can see through, and see if you ever have that disease again. There are sometimes other causes, but I have smelled a whole house full of typhoid fever in one "dishrag." I had some neighbors once—clever, good sort of folks; one fall four of them were sick at one time with typhoid fever. The doctor ordered the vinegar barrels white-washed, and threw about forty cents' worth of carbolic acid in the swill-pail and department. I went into the kitchen and made gruel—I needed a dishcloth and looked around and found several, and such "rags!" I burned them all, and called the daughter of the house to get me a dishcloth. She looked around on the table. "Why," said she, "there was about a dozen here this morning," and she looked in the wood-box and on the mantelpiece and felt in the cupboard. "Well," I said, "I saw some old black, rotten rags lying around and I burned them, for there is death in such dishcloths as those, and you must never use such again."

I took turns at nursing that family for weeks, and I believe those dirty dishcloths were the cause of all that hard work.

Therefore, I say to every housekeeper keep your dishcloths clean. You may only brush and comb your head on Sundays, you need not wear a collar unless you go from home—but you must wash your dishcloths. You may only sweep the floor when the sun gets right; the windows don't need washing, you can look out of the door; that spider's web on the front porch don't hurt anything—but as you love your lives wash out your dishcloth. Let the fox-tail grass grow in garden (the seed is a foot deep anyway), let the holes in the heels of your husband's foot-rags go undarned, let the sage go ungathered, let the children's shoes go two Sundays without blacking, let the hens set four weeks on one wooden egg—but do wash out your dishcloths. Eat without a tablecloth, wash your faces and let them dry, do without a curtain for your windows and cake for your tea—but for heaven's sake keep your dishcloth clean.

#### LESSONS IN OVARIOTOMY.

Mr. K. Thornton, of London, read, in February, before the Harveian Society of London, a paper on *Unsuccessful Ovariectomy*. He said he had learned more from his ten unsuccessful cases than from his more numerous successful ones. Septicæmia was the great cause of mortality to be dreaded; and the adoption of the antiseptic treatment had improved the chances of life. Of the ten unsuccessful cases, seven occurred in his first twenty operations; two in the second twenty; and one in his third twenty cases. He had only had one death in his last thirty-three cases. He then gave an account of these ten cases. In one there was fullness of the remaining vascular area, from the ovarian tumor becoming bloodless previously to its removal. The same thing was seen, but to a less extent, after tapping. In these cases venesection, full and free, was often most effective. In another case, the adhesions to the liver and spleen caused injuries to these viscera, but the hemorrhage ceased when the abdomen was closed; and, on *post mortem* examination, the injuries were found glazed over with lymph. In another case there was hemorrhage which might have been avoided. The pedicle was broad and spread out; and, when transfixed and ligatured, such pedicles are apt to split, and bleeding to result. His last case had died of acute pleurisy. His conclusions were as follows. 1. Avoid tapping, if possible, as it clouds the prognosis. 2. Operate early. 3. Examine every organ as thoroughly as the one to be operated upon. 4. Never operate without perfect antiseptic precautions, perfect in Mr. Lister's sense. Every student ought to be compelled to study antiseptic treatment.

#### DYSMENORRHEA—ITS TREATMENT.

By H. E. WOODBURY, M.D., Washington, D. C.

The practitioner often meets with cases of this disease of a distressing and troublesome type. Numerous remedies and modes of treatment have been proposed, but these often prove inefficient. As this painful and injurious condition may result from different causes, no single plan of treatment will be applicable to every case.

A successful treatment of several obstinate cases prompts us to give the profession the benefit of our plan, which we hope may be deemed worthy of a trial. Believing that constriction or occlusion of the cervix—the result of sub-acute inflammation of displacement—was frequently the cause of the trouble, we have pursued the following method in all cases in which it was not contra-indicated.

About one week before the time for the menstrual flow to commence, we introduce into the cervix a very small tent made from the bark of the elm (*ulmus Americanus*). We prefer this material because it is safe and cleanly; and never causes inflammation, as the sponge sometimes does. In most of these cases, we have found it very difficult to pass a small tent, moistened, more than half an inch into the cervix, on a first trial, and those used at first are only about one inch in length. After the tent is introduced, a plug of cotton, to which a cord is attached, is passed through the speculum to keep the tent *in situ*. The plug is saturated with carbolic acid and olive oil or glycerin, parts 1 to 7. By means of the cords attached to the tent and plug, the patient removes them the next morning, and uses an enema of warm water and castile soap. In an obstinate case, we use a tent every day up to the day on which the flow should commence, unless it is established sooner, substituting longer and larger ones as the cervical cavity becomes dilated. So much for the mechanical part of our treatment.

According to the indications of the case, we use one of the following remedies internally:

Concentrated tincture of helonias (false unicorn) Keith & Co's.

Fluid extract of ergot (Squibb's).

Tincture of gelsemium.

Syrup of the iodide of iron.

The patient commences taking one of the above at least three weeks before the regular date of her flow, and continues it until this is fully established. She then suspends it for a week or ten days, after which she resumes it. Sometimes we get better results from using two of the above-named remedies alternately, as the helonias and the iron, or the ergot and the iron. A gentle current of electricity is passed through the uterus once a day for two or three days before the period. The results of this plan of treatment may be stated briefly, as follows:

During the first period after this treatment, the patient suffers less pain, and the flow is somewhat increased in quantity. If it be persevered in, there will be improvement every month, and after three or four months, the cure will most likely be complete.



In all cases of dysmenorrhœa resulting from the causes we have herein set forth, we have found this plan a practical and successful one. The tent used is bland and unirritating, owing to the amount of mucilage it contains, and by means of the plug, a gentle pressure is kept up against it. As soon as the tent, on removal, is found to be freely stained with blood, we cease to use it until a week before the next period.

This treatment, it will be perceived, is especially adapted to that class of cases in which some eminent practitioners have recommended and practised incision of the cervix. We vastly prefer the method here described to incision.—*Virginia Medical Monthly*.

#### TREATMENT OF CROUP BY INJECTION OF PERCHLORIDE OF IRON INTO THE TRACHEA WITH A HYPODERMIC SYRINGE.

In the spring of 1877, Dr. Palvadeau was called to see a child, four or five years old, who was suffering acutely from dyspnoea and had quite a high fever. The little patient frequently put his hand to his throat as if to remove some obstacle which was choking him. On examination of the back of the throat, no false membrane was to be seen on the tonsils or pharynx; his cough was dry and ringing. Auscultation showed only a slight diminution of the respiratory murmur. In view of these symptoms and signs, the case was diagnosed as one of true croup. Dr. P. determined to pursue a mode of treatment which had suggested itself to his mind some time previously.

Simple "angina of the throat," and croup, are affections which differ only in the seat of the morbid manifestations, the diphtheritic membrane being formed in the two cases at different places.

In simple angina of the throat the remedy which Dr. P. states has given him the best results, and which has been found most satisfactory by many other physicians, is perchloride of iron in solution, which should be applied locally or used after the method of Aubrun—fifteen or twenty drops being placed in a glass of water, and a tablespoonful of this being taken every ten minutes, and held in the mouth a little while. Being struck with the success of this mode of treatment in simple angina, Dr. Palvadeau sought for some means by which the same remedy could be utilized in croup. In this disease the diphtheritic membranes are situated in the trachea and larynx, and cover the epiglottis; hence it is almost impossible to apply the medicine by the mouth so as to bring it in contact with the diseased surface. It was determined to use the hypodermic syringe.

A mixture was made of equal parts of solution of perchloride of iron and water, and this mixture was drawn into the syringe. The child was then held quite still upon its back, and the needle of the syringe was forced into the trachea below the thyroid cartilage to the depth of about a centimetre and a half. About five or six drops of the iron solution were then injected in such a way as to come directly in contact with the diseased surface.

In the evening the patient was seen again. Some membranous shreds had already been detached. The same operation was repeated. The next day the child had expectorated a number of pieces of false membrane. The respiration was very much easier, and an emetic was given to cause the expulsion of other pieces of membrane. The child recovered rapidly.

Dr. P. states, in answer to any objection which might be urged, that the operation is certainly much less hazardous than tracheotomy. He urges that the operation be performed early, and says that if he does not succeed, tracheotomy can then be resorted to. This is the only case which Dr. Palvadeau has treated himself, but he reports another in which the same treatment was pursued by Dr. Régi, of Toulouse. The result in this case was equally successful, three injections being made, and on two of the occasions fifteen drops were injected each time.—*La Tribune Medical*.

#### HICCOUGH CURED BY COMPRESSION.

A case is cited from a French journal, in which hiccough, which had been "incessant for fifty days," was cured in five minutes by powerful compression over the epigastrium. All other conceivable means had failed.—*Pacific Medical and Surgical Journal*, August, 1878.

#### FIFTY-TWO CONSECUTIVE SUCCESSFUL CASES OF LITHOTOMY.

Dr. Alan P. Smith, of Baltimore, recently Professor of Operative Surgery in the University of Maryland, as a part of the Report of the Section on Surgery (*Transactions of the Medical and Surgical Faculty of Maryland*, 1878), says: "Up to the present time (April 9th, 1878), I have performed the operation of lithotomy fifty-two times, and in each instance without the loss of life. Of these, 16 were below five years of age, 13 between five and ten years, 11 between ten and twenty years, 5 between twenty and forty years, and 7 between forty and seventy-five. Four were below two years of age, the youngest being twenty-one months. The oldest patient was seventy-one years. Of the whole number, only two were negroes; these, curiously, were the youngest, of twenty-one months, and the oldest, seventy-one years.

The ordinary grooved staff and knife were employed in only six of these cases, while in the remainder, the operation was performed with the lithotome, devised by my father, the late Prof. N. R. Smith. To the use of this instrument I attribute the fact, in a very great measure, that all of my operations have resulted so satisfactorily. My cases have not been selected, as I have operated in every instance where the opportunity offered, except one, in which the patient was brought into the hospital moribund, the man dying soon after admission. A *post mortem* revealed two stones in his bladder. In all but four cases the calculus was found to be single, in three there were two; in one case four calculi were extracted.

I have always observed certain rules, which have possibly been of some assistance in determining the result. I never operate when the barometer is low, preferring to postpone my work from day to day until the weather is bright and clear. This rule, I believe, applies equally to all grave surgical operations which will admit of delay. I have never used, except in some of my earliest cases, the drainage-tube passed into the bladder through the wound to facilitate the flow of urine, in the first twenty-four hours after the operation, because I have found that the presence of the tube gives rise to violent irritation of the already sensitive bladder. Instead of employing it, I prefer seeing my patient several times during that period; and if I find that the urine does not pass off freely through the cut, I introduce a gum catheter through the wound, and permit it to remain only sufficiently long to empty the bladder. This is rarely necessary in young subjects, but in adults there is almost always retention during the first twenty-four hours; rarely after that period. I always make my first incision—that is, through the skin and subcutaneous cellular tissue—very free, so that there may be no pocket in which blood, urine or pus may collect. After the operation, I anoint the parts adjacent to the wound freely with carbolized oil.

I have stated that I attribute most if not all of my success to the use of the instrument conceived by my father. I have said so, because by its aid the only two difficult features in the cutting part of the operation are made perfectly easy and mathematically certain. I refer to the first incision made through the skin and cellular tissue down to the groove in the staff, and afterwards to the passage of the knife along the groove into the bladder. Dr. Smith, in referring to these two steps of the operation, says: 'I know not how it may appear to other operators, but to me the cutting with the scalpel for the groove of the staff, the introduction of the gorget or knife into the groove of that instrument, the anxiety which is felt in regard to its being properly fixed, and the means which are necessary to determine with certainty whether it may be pushed forward with safety, constitute the most painful and perplexing part of the operation.' \* \* \* The instrument seems to me to be as nearly perfect as possible, and the only objection that I have ever heard urged against it fell from the lips of a distinguished professor of surgery, who rather complainingly said that 'with it any one could operate.'

Some of my friends say that luck has helped me much, and the following illustrative case would seem to prove the truth of the assertion. Several years since a little boy with calculus was brought from Virginia to my father; and he not feeling well on the appointed day requested me to do the operation for him. Chloroform had been administered, and I was about to proceed, when the father of the child interrupted me, saying that he had brought the case to Dr. N. R. Smith, and desired that he should do the operation. I, of course, at once made way for him, and he, with his accustomed skill and dexterity,

soon removed the calculus. The patient was placed in a bed and left doing perfectly well; but in the course of two or three hours, was seized with convulsions, and died before either of us could reach him. \* \* \*

Almost the only trouble that I have experienced after the operation has been from hæmorrhage, and that only in a few instances. I have always used opium freely in my after treatment. In every instance, but one, the patient was placed under the influence of an anæsthetic; in that case there were reasons why nothing of the kind could be used, and upon assurance being given that the operation would be done quickly, the patient submitted; the operation from the first incision to the extraction of the stone was accomplished in a few seconds less than a minute. In two instances, partial non-retention of urine was the result, and in one case there remained a small fistulous opening in the perineum, through which the urine occasionally dribbled. These occurred in ill-nourished and weakly children, who did not receive proper nursing or care, and who were allowed to be up and about before the wound had properly healed."

#### PLAN FOR ALLAYING IRRITATION OF THE MAMMARY GLANDS.

Dr. Hugh Miller, of the Glasgow Lying-in Hospital, says, in the *Edinburgh Medical Journal*:—

"For some time I had been dissatisfied with my management of the breasts where an active treatment of them had to be employed. I had used the various liniments and ointments, and I was satisfied that frequently only an imperfect trial was given to the remedy, since complaints were made that repeated frictions could not be persevered in, owing to their increasing instead of relieving the pain; and in those cases where rubbing in the remedy was an essential to the treatment, I thought the objection, when urged, was a reasonable one. With a view to avoid friction and to secure the full therapeutic effect of the belladonna, I had an alcoholic extract prepared, of double the strength of the *emplas. belladonnæ*, but kept fluid by collodion. Camphor was combined with it, for the purpose of aiding to arrest the natural mammary secretion. This preparation, now shown, is painted on the breasts much in the same way that you would use blistering fluid. No rubbing is necessary. The fluid dries quickly, is much more cleanly for the patient, has a less offensive odor than the ointment, and, in my experience, it is more reliable in its action.

This liquid preparation is painted over the affected parts of the breast night and morning, until the acute symptoms give in. Indeed, it can only be of service as a good local sedative when the free and frequent application of it to the affected part has been persevered in until decided results are secured. During the past year

I have used this preparation with very satisfactory results. Whether the inflammatory irritation accompanying the onset of the lacteal secretion had for its exciting cause exposure to cold, inflamed nipples, or obstruction in the lacteal ducts, the preparation has always seemed to be of value. I have also used the preparation beneficially, by applying it to both breasts every day, when the mother did not intend to suckle her child; and from the frequent opportunities I have had of observing the result, I am satisfied that it may safely be relied upon for restraining the secretion of milk, and acting on the walls of arterioles so as to prevent engorgement. It has the advantage over the old plan of evaporating lotions, in that it is more cleanly, and is more comfortable to the patient.

#### FORMULARY.

[From Fothergill's Hand-Book of Treatment.]

One difficulty has always been felt, and it is this: even cod liver oil is not always digested, and therefore something else was wanting. Dr. Balthazar Foster, of Birmingham, conceived the idea of utilizing Bernard's hint, and so combined ether with cod-liver oil. The increased flow of pancreatic juice so induced led to assimilation of the cod-liver oil, and thus another step forward was made in practical therapeutics. Another effect noticed by Dr. Foster was the return of a liking for fat under this plan of treatment, where previously a strong distaste to it had existed. One method is to give from ten to thirty drops ether (sulphuric) in the dose of oil; or the ether may be given in water immediately before the oil. In private practice Dr. Foster prefers to give the following mixture.

Potassæ bicarb ..... 3 jss, 3 ij;  
Acidi hydrocyan. dil. .... M m. xij-xvj;  
Spt. ætheris. .... 3 jss-3 iij;  
Aq. ad. .... 3 viij. Misce.  
3 j ter in die sumat.

This method of adding to the usefulness of a course of cod-liver oil deserves wide and general attention.

Much difference of opinion exists as to the best forms of iron for common use. Some advocate iron in powder; others as haloid salts; while some prefer what are called the lighter preparations, as the ammonio-citrate and the potassio-tartrate. Personally, I prefer to commence in convalescence with the lighter preparations, and then go on to stronger forms. Much will depend on what it is desirable to combine with it. For instance,

Amm. carb. .... gr. v;  
Ferri. am. cit. .... gr. v;  
Inf. quassiae. .... 3 j.

is a capital form in early convalescence, or in the treatment of amenorrhœa. After a time the following may be substituted for it with advantage:

Cit. fer. et quiniæ. .... gr. v;  
Liq. strychniæ. .... m. iv;  
Inf. calumbæ. .... 3 j.

This forms a beautiful tonic, effective, agreeable, and pleasing to the eye.

A common form, much used in both public and private practice, is the following:

Quin. sulph. .... gr. j;  
Tinct. fer. perchlor. .... m. x;  
Ac. hydrochlor. dil. .... m. iij;  
Inf. quassiae. .... 3 j.

Often the iron is felt to be heating, and then a little sulphate of magnesia is of service. The following is a typical prescription:

Quin. sulph. .... gr. j;  
Mag. sulph. .... 3 j;  
Liq. fer. persulph. .... m. v;  
Ac. sulph. dil. .... m. v;  
Inf. quassiae. .... 3 j

If this lies cold on the stomach, a few drops of the tincture of capsicum may be added.

For a permanent prescription, requiring to be continued for months, a pill is the best form. It admits of a large supply of material in a small space; the nausea of the disagreeable taste daily for months is also avoided; it does not affect the teeth; and it can be taken after food without attracting the attention of others, often so trying to persons in weak health. The following is a very favorite form with me:

Ac. arsenic. .... gr. j;  
Fer. sulph. exsic. .... 3 j;  
Pulv. capsici. .... 3 j;  
Pil. al. et myrrh. .... q. s.

In pil. lx, div. i semel aut bis in die.

Taken immediately after a meal, this is a digestive and tonic pill of the highest value.

One beautiful preparation of iron should not be forgotten. It is often well borne when other forms are not tolerated, and consists of the recent addition of the tincture of iron to acetate of ammonia:

Tinct. fer. perchlor. .... m. x;  
Liq. am. acet. .... 3 j.

It is beautiful to the eye, palatable, and, in consequence of the decomposition produced, readily assimilated.

#### TREATMENT OF TYPHOID FEVER.

Dr. William Pepper (*Boston Medical and Surgical Journal*).—Beginning with the second week of the disease, when the abdominal symptoms of pain and diarrhœa have fully set in, one-quarter of a grain of nitrate of silver with one-twelfth of a grain of belladonna, and from one-sixth to one-half of a grain of the watery extract of opium are exhibited in pill form three times a day after meals. He thus reduces the diarrhœa and tenderness. He uses very little stimulus, and allows only beef-tea and milk as articles of food. Quinia is given with

other tonics. Fever is reduced by frequent sponging of the skin of the entire body. When the high fever resists sponging, he employs cool baths. The best time for the use of the cold bath is in the early stage, during the first week or ten days, in cases where the temperature rises above 103°, and is not controlled by frequent spongings, large doses of quinia, dia phoretics, etc. The high fever of the subsequent stages is to a certain extent of a sympathetic nature, largely dependent on the amount of intestinal lesion; hence cold baths are then less available and attended with more risk. Nitrate of silver is used both with the hope of limiting the amount of specific follicular catarrh of the intestines, and with the intention of favorably modifying the secondary sympathetic symptoms. Dr. Pepper has cured *thirty-nine* out of the *forty* cases of typhoid fever in which it has been employed, by this nitrate of silver treatment.

#### EXTRAORDINARY SEXUAL PRECOCITY.

M. Lefebvre (*Jour. des Sci. Méd.* No. 5, 1878; from *Bull. de l'Acad. Roy. de Méd.*) gives a note on Molitor's case of a girl eight years of age who became pregnant and aborted at four weeks. The case is pretty fully described, and appears to be authentic.

#### CHLORAL IN DYSENTERY.

MILLVILLE, N.J., June 25, 1878.

PROF. H. C. WOOD:—My dear Doctor,—An invasion of dysentery in our midst reminds me of a conversation with you some time since, wherein I promised to write you the details of my manner of treating that disease with hydrated chloral injections.

A weak solution of that valuable medicine on chronic ulcers manifested such favorable results in my hands that I conceived the idea of using it locally on the inflamed and congested bowel in dysentery. The first case had been under the usual treatment for three days without relief. The child, aged 11, was tormented with thirst, pain, and tenesmus, with twenty-five or thirty dejections in twenty-four hours. In connection with other treatment I ordered five grains of chlor. hyd. dissolved in 3ij starch gruel thrown up the bowel with considerable force from a hard rubber syringe. It remained three hours, during which the child slept. Many of the other symptoms were modified, and the injection was repeated, which remained seven hours, when it came away with some fecal matter, but without tenesmus.

The child asked for food, which was given in form of mutton tea thickened with boiled wheat flour. All treatment ceased in forty-eight hours from first enema, four being given in all.

The case seemed so satisfactory that I mentioned it to my confrère Dr. J. S. Whitaker, who has pursued the same treatment with the most happy results in every case, aborting the disease within a few hours.

I may mention that he used ten grains instead of five with a lady aged 25, who had twenty or thirty calls in twenty-four hours, with complete repose for eight consecutive hours, with permanent abatement of all other symptoms, without other treatment. The number of aggravated cases of dysentery we have treated with the chloral hyd. warrants us in the assertion that if early and properly used it is *almost* a specific.

Very truly and courteously yours,

WILLIAM L. NEWELL.

—*Philadelphia Medical Times.*

#### A STRANGE CASE.

BY W. D. ROBB, M. D., WOODBURN, KY.

'Tis an old saying that "truth is stranger than fiction;" and certainly the case I am about to relate is the strongest evidence of its truth. The case in question has reference to the little daughter of Mr. Samuel B., who resides in North-East Simpson county, Kentucky. As far as I know, both parents of the child are healthy, there being nothing in either to indicate the hereditary transmission of the disease. In March, 1877, she reached her fourth year, and at that time had attained the unprecedented weight, for that age, of one hundred pounds. She measures eighteen inches across the chest and nearly five feet in height. Her mammae were as fully developed as they are at puberty, and she menstruated regularly. Up to February, 1876, though, as shown above, she was remarkably developed, she had given no indication of the following phenomenon. At that time her person became suddenly warmer than normal, and hair soft and downy, in color like that of her head, commenced growing all over her body. In a short time it had completely covered her body with the exception of her face, palms of her hands and soles of her feet, and the skin was entirely hid from view. From the entire surface of her body there is a constant and profuse perspiration, of a very offensive odor, which is easily distinguishable at some distance from her. So profuse is it that half an hour after been cleanly washed and dressed, her person and clothing will become saturated as thoroughly as if a bucket of water had been thrown over her. The perspiration is characteristic, being of a dark yellow color and of greater specific gravity than usual. Her voice is coarse like a man's and sounds as though she was speaking in a barrel. Her strength is equal to that of a full grown man. Her intellect is much beyond her years. Her form is perfect. These things all together go to make up the most wonderful case I ever heard or read of, and I think will be read with interest by every one. I will not attempt to account for its causation, but leave to the medical philosophers to solve the problem.

## SEVEN GOOD RULES FOR PRESERVING THE EYE-SIGHT.

Dr. H. C. Angell, in his little book on *How to take Care of our Eyes*, recently published in Boston, gives the following rules to be carefully observed by all persons who have a tendency to weakness of sight, or who experience unusual fatigue of the eyes in reading or other occupation requiring close use of the eyes:

1. Cease to use the eyes for the time being, and look away from the work, when sight becomes in the least painful, blurred, or indistinct. After perfect rest for a moment, or longer, work may be resumed, to be discontinued as before when the eyes feel again fatigued.

2. See that the light is sufficient, and that it falls properly upon your work. Never sit facing it. It is best that the light should fall upon the work from above and behind; failing this, it may fall from the side. Never use the eyes at twilight. Any artificial light for the evening is good, if it is brilliant enough and steady. When artificial light is at all painful, it is safer to read or write only during the day.

3. Never read in the horse or steam cars. It requires too great an exertion of the accommodative power to keep the eyes fixed on the letters.

4. Never read when lying down; it is too fatiguing for the accommodative power. Many a tedious case of weak sight has been traced to the pernicious habit of reading in bed after retiring for the night.

5. Do not read much during convalescence from illness. Before the muscular system generally has quite recovered its healthy tone, we ought not to expect the muscles of accommodation to bear the continuous use to which they are subjected in reading or writing. We cannot be sure that the delicate muscles of the eye are in a condition to be used until the muscles of the leg and the arm have regained their strength and firmness.

6. The general health should be maintained by a good diet, sufficient sleep, air, exercise, amusement, and a proper restriction of hard work.

7. Take plenty of sleep. It is a sovereign balm for those who suffer from weak sight. Retire early, and avoid the painful evening lights. Ten hours' sleep for delicate eyes is better than eight.—*Boston Journal of Chemistry*.

## A CURE FOR BONE FELONS, CARBUNCLES AND BOILS.

By I. J. M. Goss, M.D., Marietta, Ga.

As bone felons, carbuncles and boils are very painful, I propose to give a remedy for each, which, if used as directed, seldom fails to cure the above evils in a few days.

When a bone felon first begins to appear,

take strong tincture of iodine, three drachms; specific tinct. (Merrell, Thorp and Loyd's) of aconite; tinct. of arnica; tinct. of cantharides, each two drachms. Apply by wetting a cloth in this mixture, and keep it wet and apply until the pain ceases. I have used this frequently with entire success. In some cases, where the felon was two or three days old, I applied a bandage, evenly and moderately tight, from the end of the finger affected up to the hand, and then wet the bandage in this mixture three or four times a day, and, if matter is already formed, it causes it to come to the surface, so it may be let out without splitting to the bone, as is required without this treatment.

For carbuncles and boils I use: iodine, two parts; aconite, one part; and arnica, one part. Apply four times a day. This causes the carbuncle or boil to shrink away at once, if applied the first day; if, however, they are two or three days old, it causes them to shrivel and mature at once. I have used this treatment in several cases very recently with success, and now recommend it to the profession with entire confidence.—*Medical Brief*.

## A PREVENTIVE TO PITTING IN SMALL-POX.

By H. V. HURLBUT, M.D.

The following is a perfect preventive to pitting in small-pox, and as pleasant to apply as so much water. For the last eleven or twelve years, I have used the application in all cases I have treated, and among them the babe of twenty months, and so on, up to the old lady of fifty-five years, in confluent and distinct cases, and in not a single instance has it failed when faithfully applied:

R. Aqua Font. .... 1 pint.  
Acet. plumbi. .... 8 to 10 grains.

M. Sig. Keep the parts wet by frequent application of the above; it prevents the itching as well as pitting.—*Medical Brief*.

## CHLORAL HYDRATE IN LARYNGISMUS STRIDULUS.

Mr. William Stewart (*Lancet*, May 25, 1878,) has found chloral the remedy *par excellence* in laryngismus stridulus. The spasms recur at longer intervals and in a slighter form, ceasing in two to three weeks after beginning its use. He gives two grains to a child of six months, two and a-half grains at twelve months, and three grains at three years. It acts by calming the high nervous excitability. For the constitutional cachexia, he uses powders of the phosphate of lime night and morning, or a few drops of syr. hypophosphite of lime to assist in the development of the teeth and promote the general growth of the bones.



## ACNE AND ACNE ROSACEA.

*Clinical Lecture delivered at the Medical Department of the University of the City of New York.*

By H. G. PIFFARD, M.D., Professor of Dermatology.

ACNE—ACNE ROSACEA—CAUSES—TREATMENT  
FOR ACUTE AND CHRONIC STAGES.

GENTLEMEN,—The first patient whom I present to-day is one who has an eruption upon the face. It is an eruption with which you are all more or less familiar, because it is not by any means unfrequent or uncommon. The question is, from what form of skin disease is this man suffering? He has had it continuously for about two years, but for about every alternate week these little points which you see get larger. In the first place, there is a general redness of the surface. In addition, you will notice a large number of elevations; some of these are red and solid, others are mounted by little yellowish points; and here is one which is rather soft, but at the same time you do not see any yellowish point at its summit. When this soft elevation is punctured, it is, as you see, filled with pus.

On the face of this second patient there is an eruption which is very similar in appearance to the one just described, yet the eruption in these two cases differ from each other considerably. The eruption upon this woman's face is of two years standing. Her general health is very good. The *first* is a case of pure *acne*; the *second* is a case of *acne rosacea*.

## ACNE ROSACEA.

Acne rosacea is a skin affection which is always located upon the face: it is never found elsewhere, and it usually commences in the following manner; at the very beginning it will be found that there are present little reddish *rosy* spots; sometimes these little spots are accompanied by slight circumscribed infiltration of the surrounding skin. These spots are almost invariably situated upon the summit and sides of the nose, and extend from the nose to the cheeks. The small reddish spots, *guttæ* as they are sometimes called, last for a few days, perhaps for a week, and then disappear, to return in the course of a few weeks. As time goes on, for the disease is exceedingly chronic, the number of these spots increases, and they remain upon the skin longer than at first, but as they disappear they are apt to leave a slight thickening of the skin. After a time, the new spots which appear are seen before the older ones have disappeared, so that at the end of one year, perhaps, you will find a pretty uniformly diffused redness, with a slight amount of thickening of the skin. This redness disappears in a measure under pressure, but returns as soon as the pressure is removed. The color, however, does not disappear as rapidly as in acute congestion.

In addition to the redness of the surface, we now find that the veins upon the side of the nose are increased in size. When the disease has lasted for some time, the veins become prominent, especially about the *alæ* of the nose. When it has had a duration of perhaps three or four years—in some cases it occurs much sooner—the thickness of the skin covering the nose, the enlargement of the veins, and the redness are very much greater than in health, and the same changes, to a less extent, are manifest upon the cheeks.

The skin of the nose may perhaps be increased in thickness three, four, or five times, thus giving the organ a very uncomely appearance. Formerly this caution was regarded as the opprobrium of skin diseases, because it was one of the most difficult to relieve. But as we have gained a better knowledge of its causes we are, in many instances, able to remedy the cause upon which it depends, and then by appropriate local treatment to diminish very decidedly the amount of the lesion.

## CAUSE OF ACNE ROSACEA.

*First*, with regard to causes. The disease rarely occurs in young persons; it occurs most frequently between the ages of thirty-five and forty-five years. In men it depends most frequently upon some derangement of the digestive function. This derangement of the digestive function may be the result of functional or organic disease of the stomach and liver. You are all aware that habitual indulgence in the use of alcohol produces this rosaceous condition of the skin of the nose. That is not due so much to direct congestion of the face produced by the liquor, as to dyspepsia and congestion of the liver, which, by reflex action, disturbs the circulation of the face, and thus tends to produce congestion. Any cause whatever which is capable of congesting the face acts as a predisposing cause of acne rosacea. The face may be kept almost constantly congested by following certain occupations. It has become proverbial that cooks are more subject to rosacea than any other class of persons. Next to them come blacksmiths and forgers of metals. You all know that a full meal will produce more or less temporary congestion of the face. As digestion goes on and the stomach becomes empty, this congestion passes away. Now, if these causes of congestion are in constant operation—if, for example, a man lives too high and habitually drinks too much alcohol, and thus keeps his face in a constant state of congestion—the *rosaceous* condition is apt to develop.

In women, however, there is another class of causes which, in a majority of cases, operates in the production of rosacea. In them, the rosaceous condition is not so often due to derangement of the digestive function as to derangement of the uterine function. Certainly

more than one-half the cases of rosacea occurring in the female have their origin either in functional or organic diseases of the ovaries or uterus. You have already learned of the intimate relation which exists between the generative organs and the circulation of the face.

When these organs are diseased, we find that the skin of the face very often makes it manifest by congestion during the time the uterine disease exists. If the uterine disorder is chronic, there is a tendency to continued congestion, and ultimately a rosaceal condition is developed.

As causes of acne rosacea, therefore, we may look to occupation, derangement of the stomach or liver, and derangement of some portion of the generative apparatus, more especially of the uterus and ovaries.

#### TREATMENT.

You can readily perceive, as we come to speak of the treatment of these skin affections, that, if the causes of a constant, or almost constant, congestion of the face can be removed, we have an opportunity to treat the case successfully. But if we cannot remove these causes, if they are in constant operation, all that we can do in the way of treatment is simply palliative. At the very outset, therefore, we should inquire regarding the general health of the patient, especially with regard to derangements of digestion, disorders of the liver, irregularities of the bowels, etc. In the female special inquiry should be made with reference to the uterine functions. We should never forget to make close inquiry with reference to the habitual use of alcoholic stimulants, and determine as nearly as possible the quantity consumed daily. In the case before us there is quite recently an accession of the rosaceal condition. He says he has been in the habit of using alcoholic stimulants in considerable quantities, but has given them up: he has not taken very much during the past two weeks. He has been in the habit of taking sometimes as many as *twenty* drinks a day, but not sufficient to get really drunk. His former drinking has probably affected his liver, and in consequence congestion of the face has been induced, and the two or three drinks which he now takes daily are sufficient to maintain this congestion. The damage done by a single potion is not overcome before another is taken, and in that manner there is kept up a constant tendency to congestion.

In our other case the patient doubtless has some uterine disorder, and this is to be suspected from the location of the eruption about the mouth.

The man has, in addition to the slight rosaceal condition, papules and pustules of acne. The two diseases, as I have already stated, are distinct, but in the rosacea we very frequently find acne in addition.

Both the acne and the rosacea are dependent

upon the same class of causes. The first thing this man must do, if he wishes to get rid of the eruption upon his face, is to stop using alcoholic drink. We should next examine with reference to hepatic congestion, and endeavor to correct all disorders to the stomach, liver, and bowels. When that is done, we should consider what is best to be done in the way of local treatment.

#### LOCAL TREATMENT OF ACNE.

We have here pustules, papules and a certain amount of redness. Our first effort should be to remove the congestion as quickly as possible. The pustules should all be punctured; and in opening them we should cut pretty wide and reasonably deep. The papules should be treated in the same manner, and in putting your knife through them, make the incision sufficiently deep, so that they will bleed quite freely. In other words, make local depletion.

Next in order, the best application to reduce the congestion would be a poultice. If more convenient, the face can be held in hot water. To do this, let him take a basin of hot water, immerse his face, withdraw it, breathe, immerse it again, and so go on bathing the parts for some time every evening. Another method is to cover the face with pieces of muslin kept constantly wet with water as hot as it can be borne. As means for relieving local congestion, therefore, use local depletion and a poultice, which induces resolution by stimulating the circulation.

In the course of a week, if this plan of treatment is followed out faithfully, a very decided bleaching of the parts will be produced. If there is very much congestion of the skin not invaded by the pustules and papules, little scarifications may be made wherever it is most marked. Although the color at the end of a week, perhaps, may be very much improved, still there will remain a certain amount of thickening of the skin. That infiltration must be reduced, as you have often been told, by the use of alkaline applications. The face should be thoroughly rubbed three or four times a week with green soap. The soap will cause an active inflammation that will soon subside, and leave the skin yet red, but with the thickening very much reduced. The skin then usually has a polished, shining appearance.

When the infiltration and thickening have been removed, and nothing remains but the red color and polished appearance of the skin, this is most readily removed by the application of sulphur. For this purpose a wash, prepared according to the following formula, may be employed.

℞. Lac. sulphur,  
Glycerine,  
Rose-water,  
Bay rum,  $\bar{a}$ ,  $\bar{a}$ .

This should be applied every night.

In this manner, if the exciting causes have been removed, a pretty good cure can be effected in the course of two or three months.

When a varicose condition of the veins is present, the veins must be destroyed. This can be done either by dividing them crosswise, or, still better, by dividing them lengthwise, throughout their entire extent, with a thin, sharp knife, and then, if you choose, rubbing into them a small amount of the persulphate of iron. The veins can also be obliterated by touching them with a white-hot needle. The point in this item of the treatment is, by some means, to obliterate the veins.

For the thickening of the skin, present later in the disease, you will be obliged to institute an entirely different course of treatment. In the third, or last stage of the disease, the redness which characterized the earlier stages may have in great measure faded, and the principal lesion will be a marked hypertrophy of the skin. Internal medication will have little influence upon this condition. It may be diminished, although I have never seen it entirely removed, by the use of the constant galvanic current applied directly through the nose. In other cases red-hot needles will destroy more or less of the thickening, and the punctures on healing will induce a certain amount of contraction in the neighboring skin. When the thickening is excessive, excision of portions of the integument may become necessary.—*N. Y. Medical Record*, Aug. 31, 1878.

#### TREATMENT OF UMBILICAL HERNIA IN INFANTS, BY ADHESIVE PLASTER.

The *Philadelphia Medical Reporter* says :—The treatment of umbilical hernia in young children is rendered in many cases unsatisfactory and futile, because of the difficulty in retaining a compress over the umbilicus. The reason of this is in great part due to the continued mobility of the abdomen, either from crying, coughing, or other motions of the body, and any of the varieties of truss or bandage often illy serve their purpose. To remedy these difficulties, a device has been recommended, which, although quite simple, has proved exceedingly effective. It consists in binding a compress over the umbilicus by means of a strip of adhesive plaster; this method prevents the chafing, which is an unfortunate result in nearly all hernial devices for infants. A compress of requisite size, and composed of a pledget of lint, is placed over the reduced hernia, and then a strip of adhesive plaster, two inches wide, and of a length corresponding to two-thirds of the circumference of the body, is applied over it. After being once applied, the mother of the child will be able to renew it as often as it becomes necessary.

#### HOT MUSTARD BATHS IN CATARRHAL PNEUMONIA IN CHILDREN.

Dr. Leonard Weber (*Am. J. Obs.* April, '78) testifies to their great value when other remedies have failed. "As soon as pneumonia develops in cases of capillary bronchitis, the temperature rises to 103°, or more, in a few hours, the pulse beats fast, the face becomes flushed, the child is exceedingly restless, wears an anxious expression of countenance, but soon becomes apathetic and somnolent." The course of the disease is rapid and ends fatally by cyanosis. He immerses the patient in a hot mustard bath (105°), prepared by diffusing a pound of mustard in a baby tub full of hot water, keeping the child in ten minutes, making thorough friction all over the surface until the skin becomes pinkish. Then the patient is put in a warmed bed. If necessary repeat in four hours. Its *modus* of action is "ubi irritatio, ibi affluxus,"—it relieves the congested lungs and overburdened heart by increasing the amount of blood in the peripheral circulation; also by stimulating reflexly the vaso-motor centers.

### THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Science.

EDITOR:

FRANCIS W. CAMPBELL, M.A., M.D. L.R.C.P., LOND

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#### TO OUR SUBSCRIBERS.

Once more we have been permitted to reach the close of another volume, as with this issue the seventh year of the RECORD is completed. We are thankful for the support which we have received from the profession, which although not so great as we are vain enough to think our Journal deserves, yet large enough to establish it upon a permanent basis. We have endeavored to send out each month a Journal freighted with valuable practical information, and from the many flattering letters we are constantly receiving we believe that we have been successful. Very few of those who started with us seven years ago have deserted us,—a proof, we think, that our monthly visits are still appreciated. We have no promises to make for the future, we simply ask to be judged by the past, believing as we do that it presents a record of which we need not feel ashamed. We would, however, ask one favor from our Subscribers, and that is that they would recommend the

## Pharmaceutical Department.

A. H. KOLLMYER, M.A., M.D., Editor.

### CHEAP DRUGS.

By HENRY R. GRAY.  
Montreal.

In several medical journals published in the United States, very caustic and, at the same time, very true remarks have been made about the sale of inferior drugs and chemicals. Country practitioners appear to have most to say on the subject. It must not, however, be forgotten, that if there were no country practitioners to buy these cheap drugs, there would be none sold. The selling of inferior drugs to the general public is not here alluded to. One can hardly conceive a man so base as to knowingly supply a customer *unable to judge for himself* with a useless and inefficient drug. When the matter is limited to buying and selling, as between druggist and physician, one scarcely knows whom to blame most, the physician eager to buy the very lowest grade of medicine *merely because it is cheap*, or the druggist equally eager to sell it.

"An' if a man did need a poison now,  
Here lives a caitiff wretch would sell it him."

There are numbers of men in the United States, poorly educated as a rule, with no technical training whatever, who embark in the drug business, allured with the prospect that "there's millions in it," firmly resolved by fair means or foul to pocket some of those *enormous profits* popularly supposed to be the druggist's perquisite. These men look upon everything they handle in a purely commercial light, and the lowest grades of drugs and chemicals are purchased by them wherever obtainable. Low prices tempt the average country practitioner and patronage soon flows in, for no other reason than because *the drugs are cheap*. The purchaser makes no enquiry as to the maker of the chemical, nor makes any examination into the purity of the drug. Price is the only object sought.

That businesses, built up on such a reputation, are stable, is open to grave doubt, but that there is a large demand for inferior drugs in every city of the American Union is only too painfully evident. Almost every price current teems with chemical and pharmaceutical preparations at prices which effectually preclude the possibility of their being up to the standard of the Pharmacopœia. Let us hope this wave of business trickery or dishonesty has not reached our fair Dominion. Reports which have occasionally appeared at the annual meetings of the Pharmaceutical Association of the United States have alluded very favorably on the whole to the class of drugs to be found in Canadian pharmacies.

A fact or two will unfortunately show that, even in Montreal, purchasers should seek more

after quality than price. A druggist of this city supplied an institution with a certain powdered bark, for which he charged the moderate price of 80 cents per lb. What was his astonishment when informed, and proof given, that a contemporary had offered an article under the same name at 25 cents per lb. A country physician ordered from town an ounce bottle of ferri et quinia citras. He was charged 60 cents per ounce, including the bottle. Quinine at the time was worth \$5 per ounce. Comment is unnecessary. The remedy appears to be for practitioners who, from locality or class of practice, are obliged to furnish their own medicines, to be extremely careful in purchasing, and to invariably order all preparations *according to the British Pharmacopœia*, thus steadily setting their faces against cheap drugs and chemicals of indefinite strength and unknown manufacture. A little liberality on the part of the purchaser, and a little closer scrutiny as to quality, will soon cure the evil.

### NOTES ON APPRENTICESHIP.

By H. R. GRAY.

Montreal.

Pharmacists are frequently applied to by young men of twenty to twenty-three years of age, and even older (allured doubtless by the fabulous profits with which the drug business is popularly credited), desirous of being taken as apprentices or pupils to learn the drug business.

Any one at all conversant with the immense amount of daily practical experience required to make a man an efficient pharmacist will readily be impressed with the absurdity of any one beginning to learn the art of pharmacy at such an advanced period of life. The best age to begin an apprenticeship, and all authorities agree on this point, is fifteen or at latest sixteen years, and experience has shown that a youth who commences his pharmaceutical education at this age is immensely more efficient than one beginning later in life. There is a certain enthusiasm in early youth which surmounts all the drudgery of the first two or three years in a drug store, and a young man who has not gone through the drudgery has not learned the rudiments of his occupation, and without the rudiments all after experience and theoretical knowledge is built on a false foundation. The clerk who is well ground by years of gradually acquired experience in the *practice* of pharmacy is worth double the salary of one possessed only of the theory. A man experienced in both *from early youth upwards* is the most valuable of all. In England apprentices are usually indentured at fifteen, and five years is the usual term. A premium is paid in every case, and when the apprentice resides with his employer no salary is given. In the United States and Canada, apprentices are very rarely indentured, but a

verbal arrangement is made for four years, and a small salary given from the commencement, the apprentice, as a rule, residing with his parents. There can be no doubt the English system is the most thorough, and has many advocates; nevertheless, in this country, where changes of proprietorship are so frequent and business men not so firmly established, the American system is the most practicable.

The Introductory Lecture of the coming session of the Montreal College of Pharmacy will be delivered by Joseph Bemrose, Lecturer on Chemistry and Pharmacy, on Wednesday, October 2nd, at half-past eight, p.m. The public is invited to attend. Intending students should send in their names at once.

*To the Editor of the Pharmaceutical Department of the CANADA MEDICAL RECORD.*

DEAR SIR,—I was much surprised to see that there still existed any medical man who was willing to oppose the chemists of Quebec in raising the standard of their profession. The chemists do not wish to infringe upon the "rights and privileges" of the medical profession, but they have a laudable desire to secure all that properly belongs to them. It is absurd to talk about hospitals, convents and dispensaries, and even with regard to them it would be much better for such institutions to have a regularly qualified pharmacist. It would do two things, save expense and give greater confidence. Drug stores carried on by medical men are notoriously ill-managed, and I can positively affirm, from my own personal knowledge, difficult prescriptions are carefully shunned and sent to other stores. As far as I can learn, the profession generally is in favor of the ground taken by the Pharmaceutical Council, that physicians who secede from their own profession and open drug stores should pay the annual license as druggists. If the Pharmaceutical Council contemplated anything in the way of examination of licensed physicians, I should then certainly oppose them.

I remain, yours very truly,  
PROGRESS.

## REVIEWS.

*On the Therapeutic Forces.*—An effort to Consider the Action of Medicines in the Light of the Modern Doctrine of the Conservation of Force. By THOMAS J. MAYS, M.D. Price, \$1.25. Philadelphia: Lindsay & Blakiston, 1878.

The author having firmly espoused the belief that the action of medicines in the animal body is, like everything else, amenable to unchanging

laws, and that it is our duty to unravel and elucidate these laws, he proceeds to give a brief outline of the principles which underlie the action of some of the most important therapeutic agents in the light of the modern doctrine of the conservation or persistence of force. Viewed from the present standpoint of physical science, he thinks we have great reason for believing that every phenomenon in nature must be viewed as the effect of force, and can only be interpreted intelligibly when reduced to the terms of the latter; and he further thinks that the claims of therapeutics, as being a part of the grand chain of natural phenomena, are just as legitimate as those of physiology or any of the other concrete sciences.

*Fownes' Manual of Chemistry.* Revised by HENRY WATTS, B.A., F.R.S. American edition. Edited by Robert Bridges, M.D. Philadelphia: Henry C. Lea, 1878.

This is a very old friend with a new face, and in new attire; but the character of the work, as a well-arranged and highly-condensed student's manual, is well maintained. The original manual was inimitable for clear and concise definition, and, although the book has gradually grown under the care of Dr. Hofmann and the late Dr. Bence Jones far beyond its original proportions and design, we welcome the reduction of its more recent predecessors to the limit of a single volume, of convenient form, clear type, and excellent illustrations.

The student will value the clear and full expositions of *Physical Science*, and the *tabular form* of so many facts which are thus more readily retained in the memory. The medical practitioner will turn with pleasure to its copious index for the most recent facts in the somewhat hazy and nebulous domain of organic chemistry. The Chemical Professor will also largely profit by the systematic arrangement of its matter, and the glyptic formulæ in which the composition of complicated organic compounds are indicated. In point of fullness of detail, the work is a *Modern Dictionary of Chemistry*. In its explanations, it is a clear and able treatise, embracing many valuable tables from the standard works of Graham, Miller and Gmelin; together with the invaluable alcoholic tables of the lamented author.

Fownes' Chemistry has maintained a favorable reputation in Europe and America, as a Student's Text Book, for the last quarter of a century, and in its present form is deserving of a place in every medical library, as a work both of exposition and of reference.

J. B. E.



**DIALYZED IRON HYPODERMICALLY.**—Professor Da Costa has employed dialyzed iron in a novel manner, in a case of chlorosis, in a woman aged twenty-one years. The patient had daily injections of 15 minims of the iron solution, at first diluted, but afterwards of full strength. The points where the injections were made showed no evidence of inflammatory action. Subsequently the dose was raised to 30 minims, and convalescence was rapid. After the hypodermic use was ceased, 20 drops in water were given thrice daily for a short time. No constipation, indigestion, or other disturbances resulted from this mode of using the remedy, and recovery was considered to have been more rapid than it would have been with the usual way of administering it.

**DIALYZED IRON IN ARSENICAL POISONING.**—James Hayes, M.D., of Simcoe, Ont., publishes, in the *Canada Lancet* for March, a case of arsenical poisoning treated with Wyeth's dialyzed iron. Following an emetic and free draughts of warm water, a tablespoonful of the dialyzed iron was given and soon ejected; doses of thirty drops were then given every twenty minutes for two hours. Two hours after the doctor's arrival, symptoms of collapse set in, and were treated with brandy, hot bottles, and friction. The patient was restored to health in about ten days, and complained during convalescence of weakness, thirst and a burning sensation in the stomach. The doctor estimates that fully a teaspoonful of arsenious acid was lying in the stomach from half an hour to an hour before he saw her.

**DOCTORED HERBS.**—A writer in the *Schweizer Wochenschr. f. Pharm.*, 1876, No. 51, reports having met with some herbs, notably with melissa and mint, the odor of which suggested a fraudulent impregnation with volatile oil. To determine whether such was the case the following experiments were made: 30 grams each of the suspected herb, of an old herb sprinkled with a few drops of volatile oil and of a recently picked herb were macerated in a cool place with half a liter of water for 24 hours, then strained and the infusions mixed with a few grams of ether and set aside in a vessel covered with a well-fitting glass plate. After an hour the under side of the glass cover of the three liquids first showed the odor of ether, followed in the suspected and old herbs by the odor of the essential oil, which could not be perceived in the case of the fresh herb.—*Am. Jour. Pharm.*

**APIOL.**—By E. von Gerichten. In the preparation of oil of parsley by distillation of the seeds with water, there passes over besides the terpene a body which gradually separates in fine needles. This is the so-called parsley camphor or apiol. Homolle and Joret give the name apiol to a mixture of various bodies which they obtained as an oil of a greenish-brown colour by extracting parsley seeds treated with litharge, with alcohol and ether. They propose

this so-called apiol as a substitute for quinine in therapeutics. It is at least permissible to retain the name apiol for the crystallised ethereal oil—parsley camphor.

The same body may be obtained direct from the seeds by extraction with alcohol, distillation and digestion of the residue with ether; apiin remains undissolved, whilst apiol passes into solution. Apiol forms very long, white, brittle needles, having a faint smell of parsley. It fuses at 30° C. and boils at 300°; specific gravity, 1.015. It is insoluble in water, but dissolves readily in alcohol and ether. The fused apiol requires weeks and even months for perfect solidification, although by solution in alcohol the original crystals may easily be obtained again. According to Lindenbon's comparison, the results of analysis by various chemists find their simplest form of expression in the formula  $C_{12}H_{14}O_4$  (C = 64.8; H = 6.3; O = 28.8 per cent.). Additional points of support for the acceptance of this formula might be adduced. Sodium has no action on fused apiol. Concentrated sulphuric acid dissolves it, forming a blood-red colour (a precise reaction); water precipitates from this solution a brown body, which forms a bluish-green solution with alkalis, gradually becoming dirty brown. Concentrated aqueous potash solution does not affect apiol. By twelve hours' heating of apiol with alcoholic potash solution, and afterwards diluting with water, rhombic plates with the lustre of mother-of-pearl gradually separate. These are purified by re-crystallisation from alcohol. A further product of this decomposition could not be recognised. The new body melts at 53.5° C. and re-solidifies at 46° C., does not dissolve in water, but dissolves readily in alcohol and ether. It is not acted upon by aqueous potash solution; by careful oxidation with chromic acid mixture beautiful needles of a body which was not examined further were obtained; with potash permanganate, crystalline plates were separated, fusing above 100° C. With chloroform and concentrated sulphuric acid the body obtained from apiol and alcoholic potash yields a coloration, beautiful red violet at first, afterwards becoming green.—(*Jour. de Pharm. et de Chim.*), December, 1876, from *Gazz. Chim. Ital.*

#### THE DANGER OF SALICYLIC ACID DENTIFRICE.

—When a remedy has been found good for something it runs the danger of being brought into disrepute by being regarded as a panacea for all human ills. Pharmacy has its fashions as well as other things, and the present prevailing mode is salicylic acid. Dr. Buch, of St. Petersburg, deprecates its adoption as a dentifrice. A short time ago there was a warning raised against the use of charcoal. It had similar dental recommendation, namely, that it was antiseptic, and that, as far as cleansing was concerned, it was most effective. But the microscope pointed out that every particle of carbon, in however divided a state, was a small crystal, which, acting by attrition, was hurtful to the enamel. While charcoal, therefore, was said to

be a fine saw, salicylic acid is now stated to be a solvent, and accordingly to be abjured. Dr. Buch mentions that he was in the habit of using a solution of three parts in one thousand of salicylic acid, a lotion of such strength being fatal to bacteria. In a few weeks he felt a curious sensation in his mouth; the teeth appeared to become softer, and on the surface something gritty was detected, there being evidently a granular formation. The Doctor believes this to be a salicylate of lime; if so, the use of the acid as a dentifrice should be discountenanced.

The ex-Empress Eugénie, when in power, patronized a poudre dentifrice made from the charcoal of the willow-bark. The preparation commanded a large sale, but went out of vogue long before the fall of Imperialism.

We may here venture to allude to a preparation which, for occasional and careful use, is a valuable remedy for yellow, blackened, and unsightly teeth. It consists of equal parts of finely-powdered wood charcoal, prepared chalk, and cream of tartar. A few applications are sufficient to effect a decided change, followed by a wash of myrrh, eau de cologne, and glycerine. It is suggested as a trial remedy, to be used when wanted, not as a toilet requisite.—*Chemist and Druggist*.

**DETECTION OF SALICYLIC ACID IN MIXTURES.**—Concentrate the mixture in the water-bath, to remove any accompanying alcohol, add to the residue dilute sulphuric acid in strong excess, so as to render it strongly acid and to restore it to a fluid condition, and shake the whole with ether, which dissolves the salicylic acid. On evaporating the ethereal solution, the acid is left behind, and may be weighed.—*Pharm. Centralh.*, 1877, 321.

**COATED PILLS.**—Pills have a verbal as well as a material coating. Mr. G. H. Wright, of Southwark, writing in a recent number of the *Pharmaceutical Journal*, gives the following list of popular names for purgative pills, used in his locality: Wake-me-ups, rattlers, eye-openers, scavengers, early risers, castor oil pills, excavators, five o'clockers, fly-away jacks, and imperial pills.—*British Medical Journal*.

**COFFEE AS AN ANTIDOTE TO STRYCHNIA.**—Dr. Attilio Lelli having met with a case in which a large dose of strychnia was administered in coffee without fatal consequences, was led to institute some experiments to determine whether it possessed an antitoxic power against this drug. The animals employed were rabbits, and by comparative trials he found that a dose of five centigrammes proved fatal in a short space of time; when the same or a larger dose was given in a very strong infusion of coffee, he found that the coffee either acted as a complete antidote in preventing the poisonous effects of the strychnia, or that it materially diminished

the violence of its action. The details of the experiments are given in the *Rivista Sperimentale di Freniatria*, edited by Prof. Carlo Livi, of which the first Fasciculus of the third volume has just been issued.—*London Lancet*.

**FALSE SUMBUL.**—Mr. Holmes, the curator of our Society's Museum, has obligingly shown us and described the sample of false sumbul, alluded to in several of the current periodicals. It is hard to draw conclusion from any single specimen. The one which he has under examination seems more compact, heavier, and less flat generally than the ordinary commercial root. True sumbul has a curious way of disintegrating when forced apart by pressure between the hands. Nevertheless, some pieces of this sample are almost as light as the genuine article, and in appearance might easily be mistaken for it. The red color of the tincture, however, would instantly suggest either a distinct variety or sophistication, while the flavor of the preparation, decidedly that of ammoniacum, is conclusive evidence of its spurious nature. True sumbul, like musk or abelmoschus, has a diffusive, penetrating, aromatic taste, wanting in the tincture of the false root.—*Chemist and Druggist*.

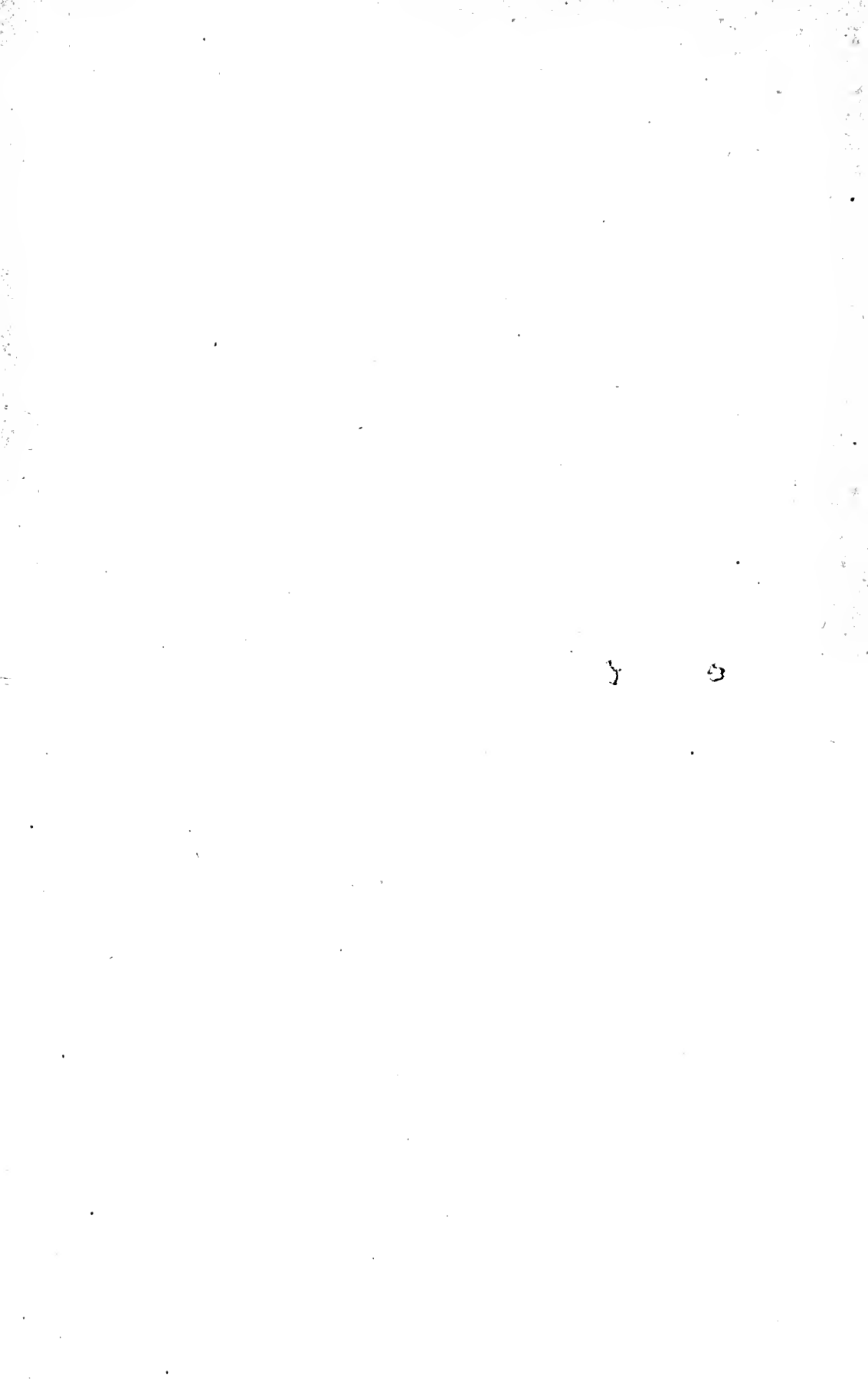
**OIL OF EGGS: A VALUABLE RECIPE.**—A German apothecary's apprentice describes the mode of preparing "oil of eggs" as follows:—"I call on the lady of the house for one dozen eggs; I boil the eggs, separate the yolks from the whites; the clerks eat the yolks, the white is for the apprentice; into the bottle I pour oil of poppy seed."—*Detroit Lancet*.

**SUBSTITUTE FOR PERSIAN INSECT POWDER.**—The *Industria Blatter* of Berlin recommends the use of the wild rosemary (*Ledum palustre*) as a substitute for the well-known Persian powder. This plant, whether fresh or dry, will kill lice, bed-bugs, fleas, moths, beetles, and their larvæ, the maggots and blue-bottles, and probably other insects. It is also the best remedy for mosquito-bites, and the bites of all other insects. A little of the tincture of the plant applied to the bite not only relieves the intolerable itching, but also relieves the pain. If the tincture be mixed with glycerine and rubbed on the skin, it will drive the mosquitoes away. If this be a fact, the plant deserves special attention. It is very probable that it will be able to entirely supplant the expensive and frequently adulterated or counterfeit insect powder. It is most effective when green and in bloom, at which time it should be gathered.

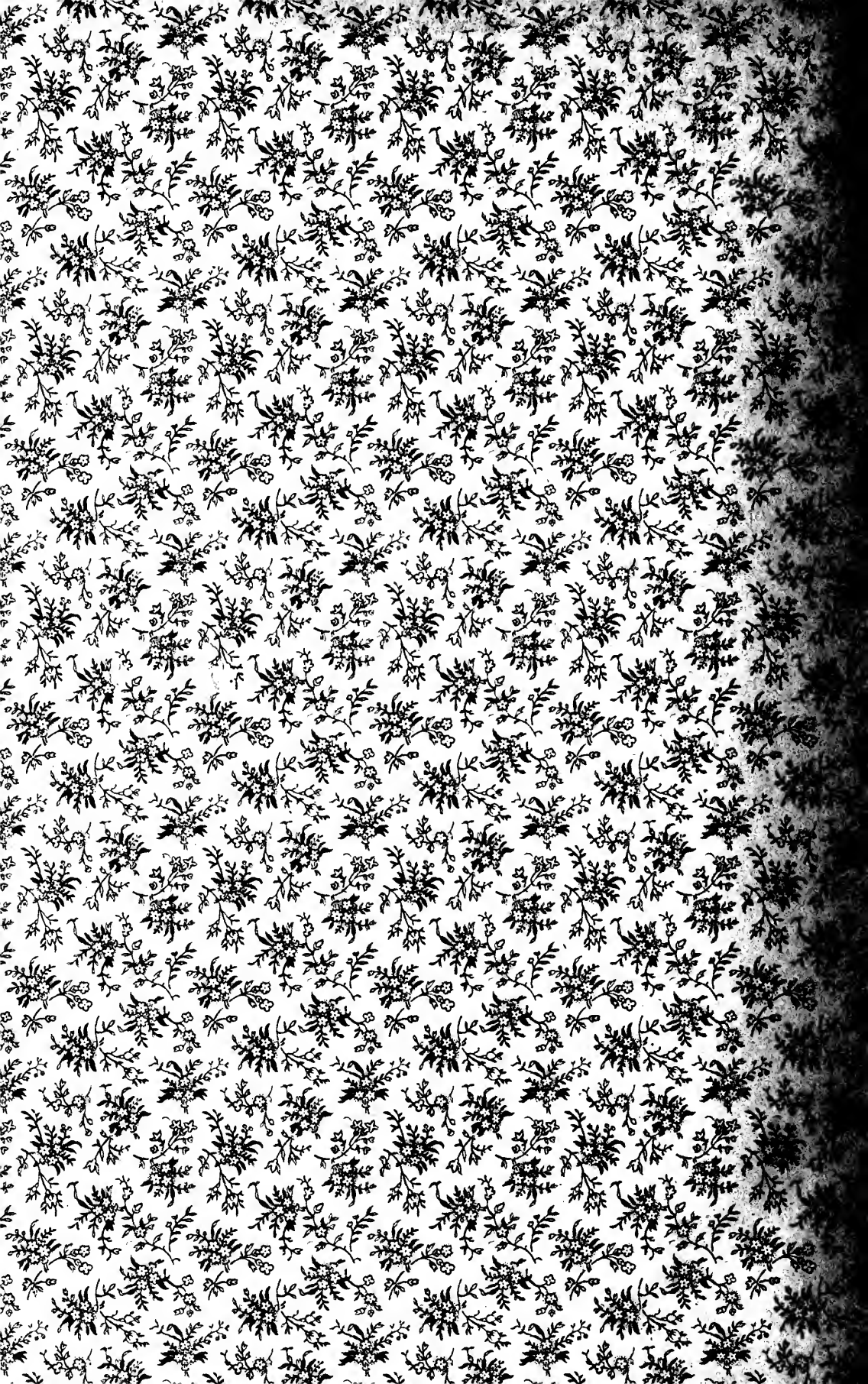
**TINCTURE STOPPERS.**—The unpleasant cementing of stoppers can be entirely prevented by rubbing the stoppers with a piece of paraffine, and giving them a turn in the neck of the bottle, so as to distribute a thin coating of paraffine all over. Renew two or three times a year.—*Phil. Druggist and Chemist*.











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